Defend what you create

User Manual

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Dr.Web Security Space
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User Manual
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Doctor Web

Doctor Web develops and distributes Dr.Web® information security solutions which provide efficient protection from malicious software and spam.

Doctor Web customers can be found among home users from all over the world and in government enterprises, small companies and nationwide corporations.

Dr.Web antivirus solutions are well known since 1992 for continuing excellence in malware detection and compliance with international information security standards. State certificates and awards received by the Dr.Web solutions, as well as the globally widespread use of our products are the best evidence of exceptional trust to the company products.

We thank all our customers for their support and devotion to the Dr.Web products!

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1. Introduction

Dr.Web Security Space provides multi-level protection of RAM, hard disks, and removable devices against viruses, rootkits, Trojans, spyware, adware, hacktools, and other malicious programs. The module architecture of **Dr.Web Security Space** is its significant feature. The anti-virus engine and virus databases are common for all components and different operating environments. At present, in addition to **Dr.Web products** for Windows, there are versions of anti-virus software for IBM® OS/2®, Novell® NetWare®, Macintosh®, Microsoft Windows Mobile®, Android®, Symbian®, and several Unix®-based systems (Linux®, FreeBSD®, Solaris®).

Dr.Web Security Space uses a convenient and efficient procedure for updating virus databases and program components via the Internet.

Dr.Web Security Space can detect and remove undesirable programs (adware, dialers, jokes, riskware, and hacktools) from your computer. To detect undesirable programs and perform actions with the files contained in the programs, standard anti-virus components are used.

Dr.Web Security Space includes the following components:

- **Dr.Web Scanner®** (**Scanner**) is an anti-virus scanner with graphical interface. The program runs on user demand or as scheduled and checks the computer for viruses. There is also a command line version (**Dr.Web Console Scanner®**).
- **SpIDer Guard®** is an anti-virus guard. The program resides in the main memory, checks files and memory on the fly, and detects virus-like activity.
- **SpIDer Mail®** is an anti-virus guard for e-mail. The program intercepts calls sent from mail clients to mail servers through POP3/SMTP/IMAP4/NNTP protocols (IMAP4 stands for IMAPv4rev1), and detects and neutralizes mail viruses before a mail message is received by the mail client or before a mail message is sent to the mail server. **SpIDer Mail** uses Anti-spam to scan mail for spam messages.

- **Dr.Web for Outlook** is a plug-in that checks Microsoft Outlook mail boxes for viruses and spam.
- **SpIDer Gate™** is an HTTP monitor. By default, **SpIDer Gate** automatically checks incoming HTTP traffic and blocks all malware objects.
- The **Parental Control** component is used to restrict access to devices, various local and network resources, and allows to set custom time limits on using your computer and the Internet for different Windows accounts.
- **Dr. Web Firewall** protects your computer from unauthorized access and prevents vital data from leaking through networks.
- **Dr.Web Updater** allows registered users to receive updates of the virus database and other program files as well as automatically install them.
- **SpIDer Agent** is a utility that lets you set up and manage **Dr.Web Security Space** components.

1.1. About This Manual

This User Manual describes installation and effective utilization of **Dr.Web Security Space**.

You can find detailed descriptions of all graphical user interface (GUI) elements in the Help system of **Dr.Web Security Space** which can be accessed from any component.

This User Manual describes how to install **Dr.Web Security Space** and contains some words of advice on how to use the program and solve typical problems caused by virus threats. Mostly, it describes the standard operating modes of the program's components (with default settings).

The Appendices contain detailed information for experienced users on how to set up **Dr.Web Security Space**.

Due to constant development, program interface of your installation can mismatch the images given in this document. You can always find the actual documentation at http://download.drweb.com/doc.

1.2. Document Conventions

The following symbols and text conventions are used in this guide:

Convention	Description
Bold	Names of buttons and other elements of the graphical user interface (GUI), and required user input that must be entered exactly as given in the guide.
Green and bold	Names of **Dr.Web** products and components.
Green and underlined	Hyperlinks to topics and web pages.
`Monospace`	Code examples, input to the command line and application output.
Italic	Placeholders which represent information that must be supplied by the user. For command-line input, it indicates parameter values. In addition, it may indicate a term in position of a definition.
CAPITAL LETTERS	Names of keys and key sequences.
Plus sign ('+')	Indicates a combination of keys. For example, ALT+F1 means to hold down the ALT key while pressing the F1 key.
Exclamation mark	A warning about potential errors or any other important comment.

The following abbreviations are used in this User Manual:

- GUI – Graphical User Interface (GUI version of a program, a version that utilizes the GUI)
- OS – operating system
- PC – personal computer
- RAM – Random Access Memory

1.3. System Requirements

Before installing **Dr.Web Security Space**:

- Install all critical updates recommended by the operating system developer.
- Uninstall all other anti-virus packages from the computer to avoid possible incompatibility with their resident components.
- If you install **Dr.Web Firewall**, uninstall all other firewalls.

Specification	Requirement
OS	For 32-bit platforms: • Windows® XP with Service Pack 2 or 3 • Windows Vista® • Microsoft® Windows® 7 • Microsoft® Windows® 8 For 64-bit platforms: • Windows Vista® • Microsoft® Windows® 7 • Microsoft® Windows® 8 You may need to download and install certain system components from the official Microsoft website. If necessary, the program will notify you about the components required and provide download links.
Hard disk space	450 MB for **Dr.Web Security Space** components. Files created during installation will require additional space.
CPU	i686 compatible.
Resolution	Recommended minimum screen resolution is 800x600.
Free RAM	Minimum 512 MB of RAM.
Other	Internet connection for updating virus databases and **Dr.Web Security Space** components.

1.4. Licensing

The use rights for the **Dr.Web Security Space** are specified in the key file.

To use **Dr.Web Security Space**, obtain and install a key file.

For more information on licensing and types of key files, visit the official Doctor Web website.

1.4.1. Key File

The key file contains the following information:

- list of components a user is allowed to use
- duration of the license
- other restrictions (i.e., the number of computers on which a program is allowed to be used)

There are three types of key files:

- *License key file* is purchased with the **Dr.Web** software and allows a user to use the software and receive technical support. Parameters of the license key file are set in accordance with the software's license agreement. It also contains information about the user and seller.
- *Demo key file* is used to evaluate **Dr.Web** products. It is completely free, provides full functionality of the software, but has a limited duration – 30 days (if it is a promotion license key file – 3 months).

Demo key files for the same computer cannot be obtained more often than once in four months. For a promotion license key file – only once a year.

- *Temporary key file* is used if you do not install a license or demo key file during installation. This key file provides full functionality of **Dr.Web Security Space** components, however, updating is not available until you have installed license or demo key file. Furthermore, the **My Dr.Web** and **Update** items of SpIDer Agent menu will be inaccessible.

A *valid* license key file satisfies the following criteria:

- License is not expired
- All anti-virus components required by **Dr.Web Security Space** are licensed
- Integrity of the license key file has not been violated

If any of the conditions are violated, the license key file becomes *invalid* and **Dr.Web Security Space** stops detecting and neutralizing malicious programs.

1.4.2. Obtaining Key File

You can receive key files in one of the following ways:

- During installation
- Via manual product registration on the official Doctor Web website
- Within the product distribution kit
- On a separate data carrier provided by the seller

Key files received during installation or within the installation kit are installed automatically. You need to install key files received in any other way.

To acquire key files via manual registration

To register and download key files, a valid Internet connection is required.

To receive a license key file, a product serial number is required. Without a serial number, you can only receive a demo key file during installation.

1. Launch an Internet browser and go to the site specified on the product registration card supplied with your copy of the product.
2. Fill in the registration form.
3. Enter the serial number found on the registration card.
4. The license key file is archived and sent to the e-mail address you specified in the registration form. After registration, you can also download the license key file from the registration page. Windows operating systems extract files from ZIP-archives automatically. You do not need to purchase or install additional software.
5. Install the key file.

To acquire key files during installation

To register and download key files, a valid Internet connection is required. Before installation, ensure that your computer is connected to the Internet. You can receive a demo key file during the registration procedure.

1. Start the installation procedure (See Installation Procedure).
2. In the **License Key file** step, select **Receive Key file during installation**.
3. Follow instructions to complete the rest steps of the installation. Once the installation completes, the procedure of obtaining a key file starts. On its completion, **Dr.Web Security Space** automatically downloads and installs a license key file.

The key file can be delivered as a .key file or an archive containing such a file. A user can receive a key file via the **Dr.Web Updater** during installation or the first update. The utility registers the program (after the serial number is provided) on the official website and receives the key file. This procedure is available only for **Dr.Web** programs that protect individual workstations. Without a serial number, a user can only receive a demo key file. (See Receiving key file).

It is recommended to keep the key file until it expires. If you re-install a product or install it on several computers, you do not have to register the serial number again; you can use the key file received during the first registration.

Demo key file can be used only on the computer on which it was registered.

Subsequent Registration

If a key file is lost, you must register again by inputting the personal data you provided during the previous registration. You may use a different e-mail address. In this case, the key file will be sent to the address specified.

When recovering a demo key file, you will receive the same key file as you received during the previous registration.

The number of times you can request a key file is limited. One serial number can be registered no more than 25 times. If requests in excess of that number are sent, no key file will be delivered. To receive a lost key file, contact Technical Support, describe your problem in detail and state personal data you entered when you registered the serial number.

1.4.3. Renewing Registration

When your license expires or the security of your system is reinforced, you may need to update the license. The new license should be registered with the product. **Dr.Web Security Space** supports hot license updates without stopping or reinstalling the product.

To renew license key files

1. Open License Manager. To purchase a new license or renew an existing one, you can also use your personal web page on the **Doctor Web** website. To visit your page, use the **My Dr.Web** option in the **License Manager** or SpIDer Agent menu.
2. If your current key file is invalid, **Dr.Web Security Space** automatically switches to the new license.

1.5. Detection Methods

Dr.Web anti-virus solutions use several malicious software detection methods simultaneously, and that allows them to perform thorough checks on suspicious files and control software behaviour:

1. The scans begin with *signature analysis*, which is performed by comparing file code segments to the known virus signatures. A signature is a finite continuous sequence of bytes that is necessary and sufficient to identify a specific virus. To reduce the size of the signature dictionary, **Dr.Web anti-virus solutions** use signature checksums instead of complete signature sequences. Checksums uniquely identify signatures which preserves the correctness of virus detection and neutralization. The **Dr.Web virus databases** are composed in such a way that some entries can be used to detect not just specific viruses but whole classes of threats.
2. On completion of signature analysis, **Dr.Web anti-virus solutions** use the unique **Origins Tracing™** method to detect new and modified viruses that use known infection mechanisms. Thus, **Dr.Web** users are protected against viruses such as notorious blackmailer Trojan.Encoder.18 (also known as gpcode). In addition to detecting new and modified viruses, the **Origins Tracing** mechanism considerably reduces the number of incidents of false triggering of the **Dr.Web** heuristics analyzer.
3. The detection method used by the *heuristics analyzer* is based on certain knowledge about the attributes that characterize malicious code. Each attribute or characteristic has a weight coefficient that determines the level of its severity and reliability. Depending on the sum weight of a file, the heuristics analyzer calculates the probability of unknown virus infection. As with any system of hypothesis testing under uncertainty, the heuristics analyzer may commit type I or type II errors (i.e., it may omit viruses or raise false alarms).

While performing any of the aforementioned checks, **Dr.Web anti-virus solutions** use the most recent information about known malicious software. As soon as **Doctor Web Virus Laboratory** experts discover new threats, they issue an update on virus signatures, behaviour characteristics, and attributes. In some cases updates can be issued several times per hour. Therefore even if a brand new virus passes through the **Dr.Web resident guards** and penetrates the system, then after update the virus is detected in the list of processes and neutralized.

1.6. How to Test Anti-virus

The European Institute for Computer Anti-Virus Research (EICAR) Test File helps test the performance of anti-virus programs that detect viruses using signatures.

For this purpose, most anti-virus software vendors generally use a standard test.com program. This program was specially designed to let user test the reaction of newly installed anti-virus tools that detect viruses without compromising the security of their computers. Although the test.com program is not actually a virus, it is treated by the majority of anti-viruses as if it were one. Upon detecting this "virus", **Dr.Web Security Space** reports the following: `EICAR Test File (Not a Virus!)`. Other anti-virus tools alert users in a similar way.

The test.com program is a 68-byte COM-file that prints the following line on the console when executed: `EICAR-STANDARD-ANTIVIRUS-TEST-FILE!`

The test.com file contains the following character string only:

```
X5O!P%@AP[4\PZX54(P^)7CC)7}$EICAR-STANDARD-ANTIVIRUS-TEST-FILE!$H+H*
```

To create your own test file with the "virus", you can create a new file with this line and save it as test.com.

When you attempt to execute an EICAR file while **SpIDer Guard** is running in the optimal mode, the operation is not terminated and the file is not processed as malicious since it does not pose any actual threat to your system. However, if you copy or create such a file in your system, then it is detected by **SpIDer Guard** and moved to **Quarantine** by default.

2. Installing Dr.Web Security Space

Before installing the program, we strongly recommend to:

- install all critical updates released by Microsoft for the OS version used on your computer (they are available on the company's updating web site at http://windowsupdate.microsoft.com);
- check the file system with the system utilities and remove the detected defects;
- close all active applications.

Dr.Web Security Space is not compatible with other anti-virus software. Installing two anti-virus programs on one computer may lead to a system crash and the loss of important data.

2.1. Installation Procedure

Only a user with administrative privileges can install **Dr.Web Security Space**.

There are two installation modes of **Dr.Web Security Space**:

1. The background mode.
2. The usual mode.

Installing with command line parameters

To install **Dr.Web Security Space** with command line parameters, enter in the command line the executable file name with necessary parameters (these parameters affect installation in background mode, installation language, reboot after installation, and **Dr.Web Firewall** installation).

Parameter	Description
reboot	Restart computer automatically after installation is complete.
installFirewall	Install **Dr.Web Firewall**.
lang	Language used for the installation. The value of this parameter is language in ISO 639-1 format.
silent	Installation in background mode.

For example, to start background installation of **Dr.Web Security Space** with reboot after installation, execute the following command:

```
C:\Documents and Settings\drweb-900-win-space.exe /silent yes /reboot yes
```

Usual Installation

To start usual installation, do one of the following:

- run the file, if the installation kit is supplied as a single executable file;
- insert the company disk into the CD/DVD drive, if the installation kit is supplied on the disk. If autorun is enabled, the installation will start automatically. If autorun is disabled, run the autorun.exe file of the installation kit manually. In the open window, click **Install**.

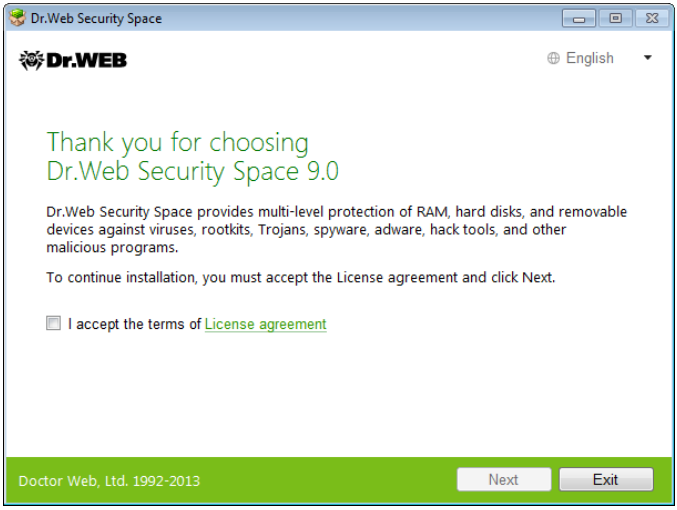
Follow the instructions of the installation wizard. At any installation step, before the wizard starts copying files to your computer, you can do the following:

- return to the previous step by clicking **Back**;
- go to the next step by clicking **Next**;
- abort installation by clicking **Exit**.

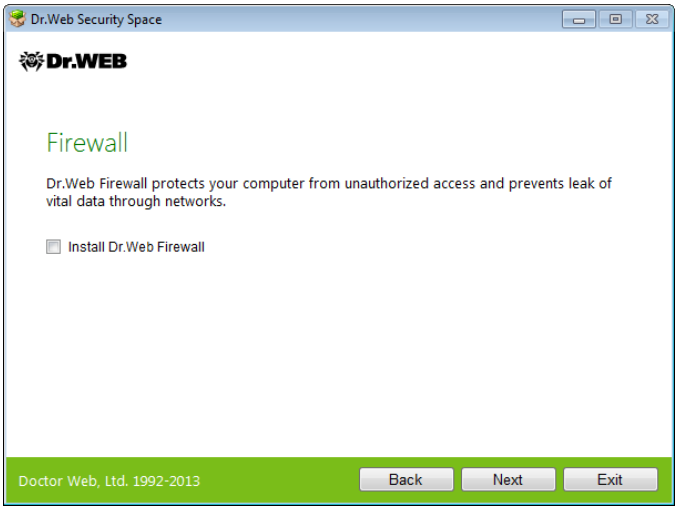
Installation Wizard checks if the installation file is the latest one. If newer installation file exists, you will be offered to download it before the installation.

Installation procedure

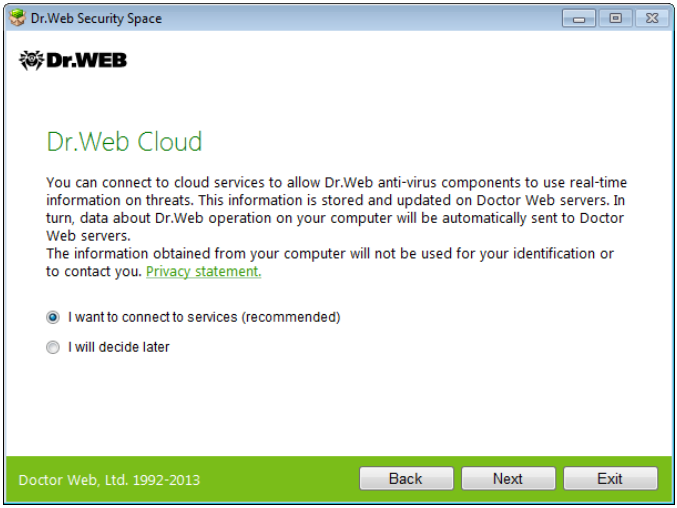
1. If other anti-virus software is installed on your computer, the installation wizard informs you on incompatibility between **Dr.Web Security Space** and other anti-virus products and offers to remove it.
2. Read the license agreement. To continue installation, you must accept its terms and click **Next**.


Dr.Web Security Space
Dr.WEB
English
Thank you for choosing
Dr.Web Security Space 9.0
Dr.Web Security Space provides multi-level protection of RAM, hard disks, and removable devices against viruses, rootkits, Trojans, spyware, adware, hack tools, and other malicious programs.
To continue installation, you must accept the License agreement and click Next.
I accept the terms of License agreement
Doctor Web, Ltd. 1992-2013
Next
Exit

3. In the next window you will be offered to install **Dr.Web Firewall**.



4. On this step, you are prompted to connect to **Dr.Web** cloud services that allow to check Web sites using the newest information.


Dr.Web Security Space
Dr.WEB
Dr.Web Cloud
You can connect to cloud services to allow Dr.Web anti-virus components to use real-time information on threats. This information is stored and updated on Doctor Web servers. In turn, data about Dr.Web operation on your computer will be automatically sent to Doctor Web servers.
The information obtained from your computer will not be used for your identification or to contact you. Privacy statement.
I want to connect to services (recommended)
I will decide later
Doctor Web, Ltd. 1992-2013
Back
Next
Exit

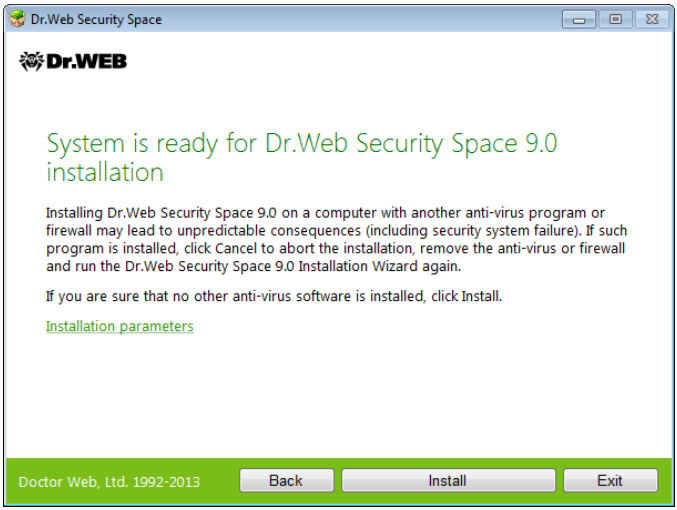
5. On this step, the installation wizard informs you that a key file is required for **Dr.Web Security Space** operation. There are two types of key files: license and demo key file. Do one of the following actions:
   - if a key file is present on the hard drive or removable media, click **Browse** and select the key file in the appeared dialog window;
   - if you want to receive a key file during the installation, select **Receive key file during installation**;
   - if you want to continue the installation and use a temporary key file, select **Receive key file later**. Updating is not available until you have installed license or demo key file.

   Click **Next**.

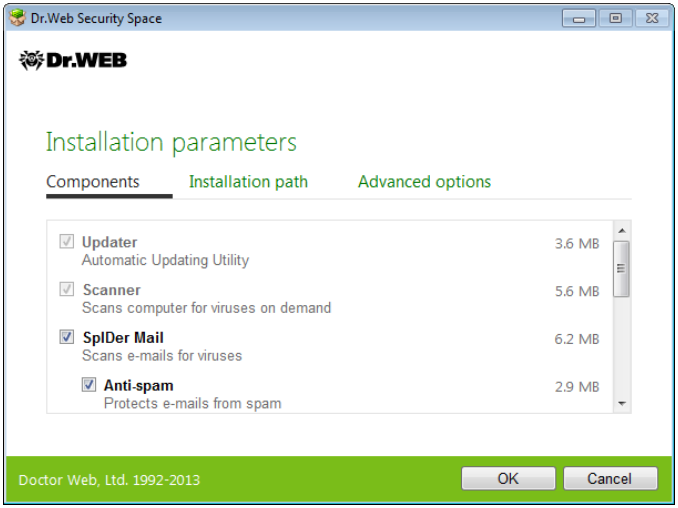
Use only a **Dr.Web Security Space** key file. Key files of this type have the .key extension.

6. The window displays, informing you that the program is ready to be installed. To start installation with the default parameters, click **Install**.

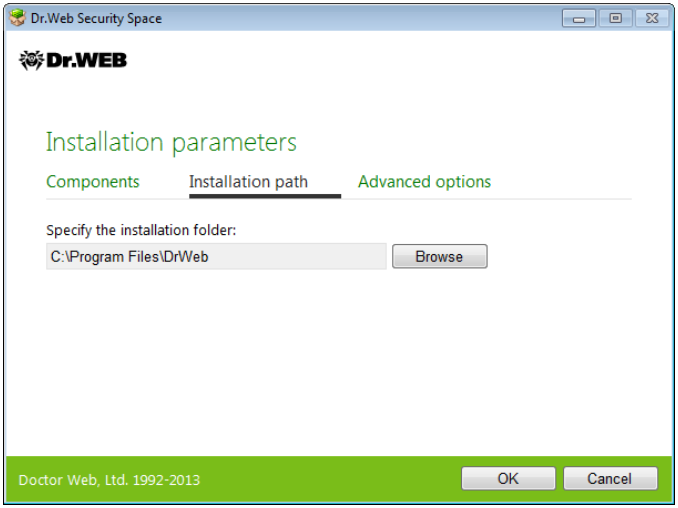
   To select components to be installed, specify the installation path and other additional parameters, click **Installation parameters**. The option is meant for experienced users.


Dr.Web Security Space
Dr.WEB
System is ready for Dr.Web Security Space 9.0 installation
Installing Dr.Web Security Space 9.0 on a computer with another anti-virus program or firewall may lead to unpredictable consequences (including security system failure). If such program is installed, click Cancel to abort the installation, remove the anti-virus or firewall and run the Dr.Web Security Space 9.0 Installation Wizard again.
If you are sure that no other anti-virus software is installed, click Install.
Installation parameters
Doctor Web, Ltd. 1992-2013
Back
Install
Exit

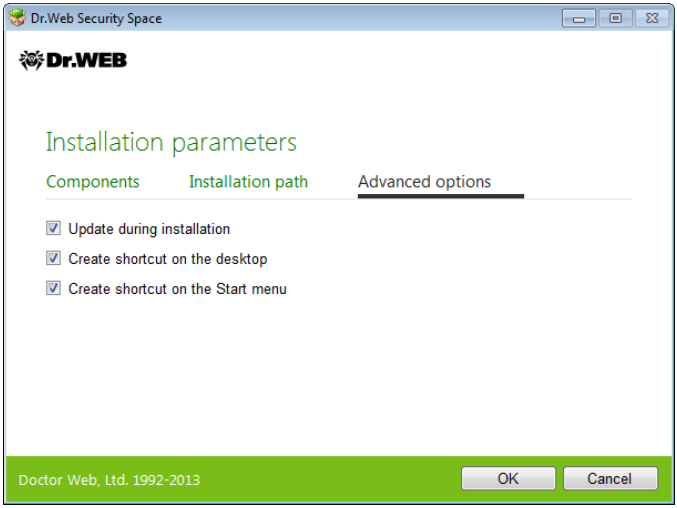
7. If you clicked Install on the previous step, go to the description of step 10. Otherwise, the **Installation parameters** window displays. On the first tab, you can specify the components to be installed.



8. On this tab, you can change the installation path.



9. If you specified a valid key file or selected **Receive key file during installation** on step 5, the last tab of the window allows you to select **Update during installation** checkbox to download updates to virus databases and other program components. The window also prompts you to create shortcuts to **Dr.Web Security Space**.



When you finish adjusting the installation parameters, click **OK**.

10. If you selected **Receive key file later** on step 5, the procedure of receiving the key file from the Internet starts on this step.
11. During default installation as well as if you specified a key file or received it during the installation and selected **Update during installation** checkbox on step 9, the wizard updates virus databases and other **Dr.Web Security Space** components. Updating starts automatically and does not require any additional actions.
12. If you selected **Dr.Web Firewall** to be installed, it is required to restart the computer after the installation completes.

2.2. Removing or changing Dr.Web Security Space

1. Start the installation wizard with the special tool Add or Remove programs of the Windows operating system.
2. In the opened window, select the installation mode
   - to select the components to install, select **Change components**;
   - to restore anti-virus protection on your computer, select **Restore program**;
   - to remove all installed components, select **Remove program**.

Dr.Web Security Space
Dr.WEB
Removing or changing Dr.Web Security Space components
Change components
Configure Dr.Web Security Space components according to your needs
Restore program
Restore Dr.Web anti-virus protection on your computer.
Remove program
Remove Dr.Web anti-virus protection from your computer.
Doctor Web, Ltd. 1992-2013
Cancel

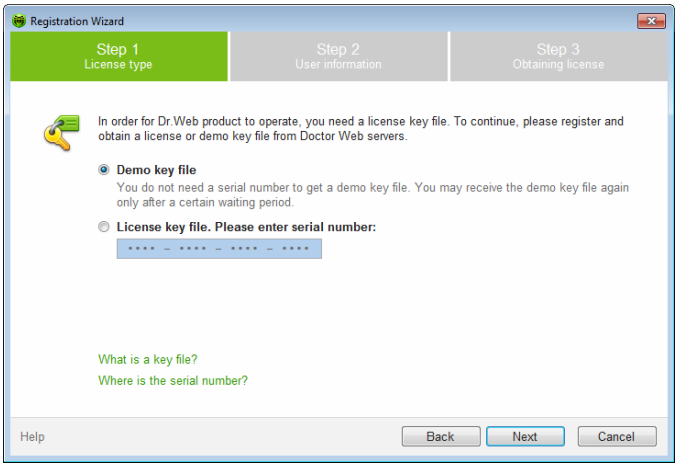
3. To remove **Dr.Web Security Space** or select components to be installed, it is required to enter the confirmation code from the picture in the opened window.
4. If the program prompts you, restart the computer to complete the procedure.

2.3. Obtaining Key Files

The registration procedure for a new key file starts automatically during installation or can be launched from the **SpIDer Agent** menu once the installation is complete. This procedure helps you connect to the **official Doctor Web website** and register your installation.

To obtain a key file

1. During the first step of the procedure, you will be asked to choose what type of key file you would like to obtain – either a license or a demo key file.

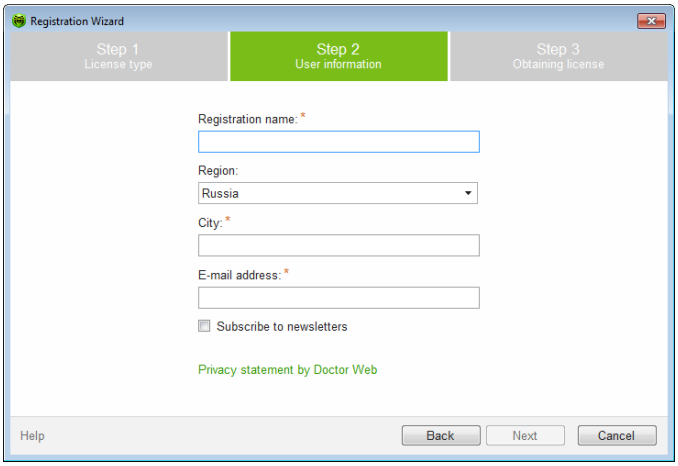

Registration Wizard
Step 1
License type
Step 2
User information
Step 3
Obtaining license
In order for Dr.Web product to operate, you need a license key file. To continue, please register and obtain a license or demo key file from Doctor Web servers.
Demo key file
You do not need a serial number to get a demo key file. You may receive the demo key file again only after a certain waiting period.
License key file. Please enter serial number:
What is a key file?
Where is the serial number?
Help
Back
Next
Cancel

If you received a serial number when you purchased your **Dr.Web** product, select **License key file**, and enter the serial number. If you want to install the product for demonstration purposes, select **Demo key file**, and go to step 2.

If you have used **Dr.Web Security Space** in the past, you may be eligible for a 150-day extension to your new license. To enable the bonus, enter your registered serial number or provide the license key file.

Click **Next**. The registration data window opens.

2. Fill in all necessary fields in the registration form to receive a key file, and click **Next**.



3. The procedure of receiving the license key will start. If the key file is downloaded successfully, the window displays an appropriate message and duration of the license. Otherwise, an error message will appear.

3. Getting Started

The installation program allows you to install the following **Dr.Web Security Space** components on your computer:

- **Scanner** (GUI and console versions)
- **SpIDer Guard**
- **SpIDer Mail**
- **Dr.Web for Outlook**
- **SpIDer Gate**
- **Parental control**
- **Firewall**
- **Automatic Updating Utility**
- **SpIDer Agent**
- **Anti-spam**

The components of **Dr.Web Security Space** use common virus databases and anti-virus engine. In addition, uniform algorithms that detect and neutralize viruses in scanned objects are implemented. However, the methods of selecting objects for scanning differ greatly, which allows these components to be used for absolutely different and mutually supplementary PC protection policies.

For example, **Scanner** scans (on user demand or according to schedule) certain files (e.g., all files, selected logical disks, directories). By default, the main memory and startup files are scanned too. Since it is the user who decides when to launch a task, there is no need to worry about the sufficiency of computational resources needed for other important processes.

SpIDer Guard constantly resides in the main memory of the PC and intercepts calls made to the objects of the file system. The program checks for viruses in files that are being launched, created, or changed on the hard drives and those that are opened on removable media and network drives. Due to a balanced approach to the level of the file system scanning details the program hardly disturbs other processes on the PC. However, this results in insignificant decrease of virus detection reliability.

An advantage of the program is that it provides you with uninterrupted control of the virus situation during the entire time a PC is running. In addition, some viruses can only be detected by the guard through their specific activity.

SpIDer Mail also constantly resides in the memory. The program intercepts all calls from your mail clients to mail servers via POP3/SMTP/IMAP4/NNTP protocols and scans incoming and outgoing e-mail messages before they are received (or sent) by the mail client. **SpIDer Mail** is designed to check all current mail traffic going through a computer. As a result, it becomes more efficient and less resource-consuming to scan mailboxes. For example, you can control attempts at mass distribution of a mail worm's functional copies to the addresses specified in the user address book which is performed via the worm's own mail clients. You can also disable scanning of e-mail files for **SpIDer Guard**, which considerably reduces consumption of computer resources.

An anti-virus HTTP monitor, **SpIDer Gate** by default automatically checks incoming HTTP traffic and blocks all malware objects. HTTP is used by web browsers, download managers and, other applications that exchange data with web servers, i.e. those that work with the Internet. **SpIDer Gate** resides in the computer's main memory and automatically launches upon Windows startup. You can change the automatic launch mode by clearing the corresponding check box.

The **Parental Control** component is used to restrict access to both local and web resources.

Dr.Web Firewall protects your computer from unauthorized access and prevents vital data from leaking through networks. **Firewall** monitors connection attempts and data transfer and helps you block unwanted or suspicious connections on both network and application levels.

Ensuring Protection Against Virus Threats

To ensure comprehensive anti-virus protection, we advise you to use the **Dr.Web Security Space** components as follows:

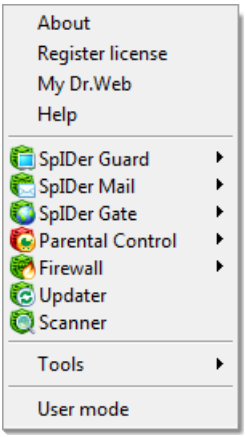
- Scan your computer file system with the default (maximum) scanning detail settings.
- Keep default settings of **SpIDer Guard**.
- Perform complete e-mail scanning with **SpIDer Mail**.
- Perform scanning of incoming HTTP-traffic with **SpIDer Gate**.
- Block all unknown connections with **Dr.Web Firewall**.
- Perform a periodic complete scan of your PC that coincides with when virus database updates are issued (at least once a week).
- Immediately perform a complete scan whenever **SpIDer Guard** has been temporarily disabled and the PC was connected to the Internet or files were downloaded from removable media.

Anti-virus protection can only be effective if you update the virus databases and other program files regularly (preferably every hour). For more information, read Automatic Updating.

3.1. SpIDer Agent

After **Dr.Web Security Space** has been installed, a **SpIDer Agent** icon is added to the taskbar notification area. If you hover the mouse cursor over the icon, a pop-up appears with information about the components that are running, the date of last update, and amount of virus signatures in the virus databases. Furthermore, notifications, which are adjusted in the settings (see below), may appear above the **SpIDer Agent** icon.

The context menu of the icon allows to perform the main management and settings functions of **Dr.Web Security Space**.



The **About** item opens a window showing information about your version of **Dr.Web Security Space**.

The **Register license** item starts the registration procedure for receiving a key file from **Doctor Web** servers.

The **My Dr.Web** item opens your personal web page on the **Doctor Web** official website. This page gives information about your license (e.g., period of usage, serial number), and allows you to renew your license, contact Technical Support, etc.

The **Help** item opens the **Dr.Web Security Space** help system.

The **SpIDer Guard**, **SpIDer Mail**, **SpIDer Gate**, **Parental Control**, **Firewall** and **Update** items allow you to access the management and settings features as well as statistics of the corresponding components.

The **Scanner** item runs **Dr.Web Scanner**.

The **Tools** item opens a submenu that provides access to:

- License Manager
- Main settings of **Dr.Web Security Space** and particular components
- Quarantine Manager
- Anti-virus Network
- Components statistics
- Report generation wizard

Before contacting **Doctor Web** Technical Support, generate a report than indicates how your operating system and **Dr.Web Security Space** are functioning.To adjust parameters, in the opened window, click **Report settings**. The report will be stored as an archive in the Doctor Web subfolder of the %USERPROFILE% directory.

The **Administrative**/**User mode** item allows you to switch between full-function **Administrative mode** and restricted **User mode**. In **User mode**, access to settings of components is forbidden, as well as disabling of all components and self-protection. You need administrative rights to switch to **Administrative mode**.

This item displays when you do not have administrative privileges. For instance, this item displays when you log into Microsoft Windows XP operating systems as a non-privileged user, or when User Account Control of Windows Vista or Microsoft Windows 7 operating system is enabled. Otherwise, the item is hidden and **SpIDer Agent** menu provides access to all features.

3.2. Main Settings

Dr.Web Security Space settings are not available in User mode.

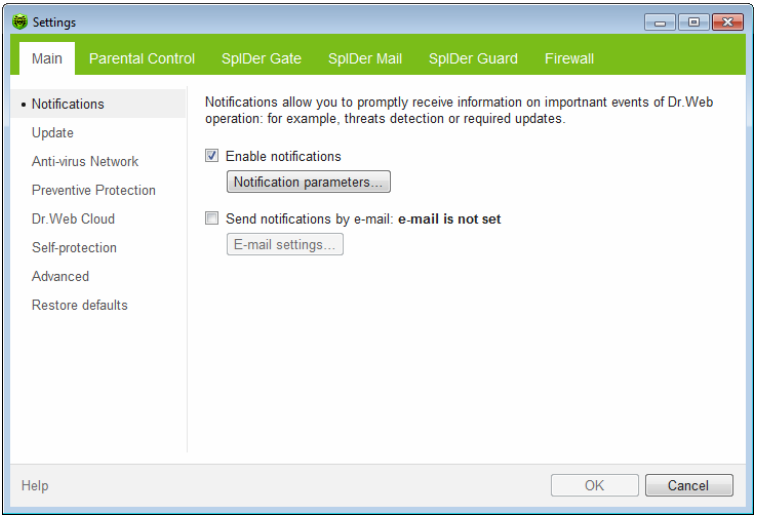
Centralized settings adjustment allows you to configure main **Dr.Web Security Space** settings and settings of all its components except **Scanner**.

To configure main settings

1. Click the **SpIDer Agent** icon in the Windows notification area.
2. Select **Tools** and then select **Settings**. A settings window opens on the **Main** tab.
3. Configure required settings. For information on settings in the sections, click **Help**.

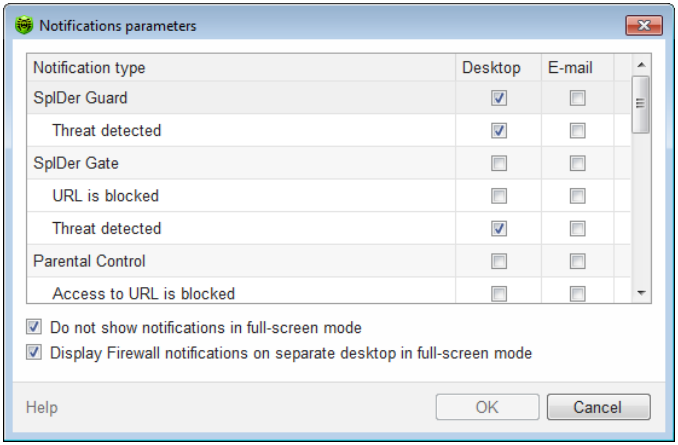
3.2.1. Notifications Page

On this page, you can set the types of e-mail notifications or pop-ups that appear above the **SpIDer Agent** icon in the taskbar notification area.



To configure notifications

1. To receive notifications of any kind, select the **Enable notifications** checkbox.
2. Click **Notification parameters**. The windows listing available notifications opens.



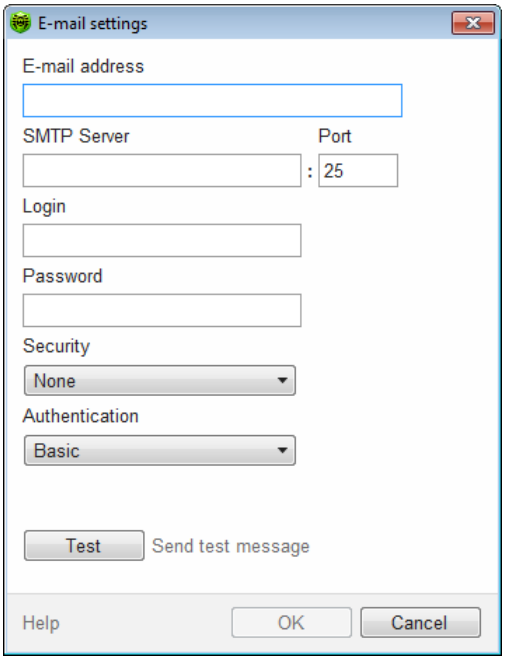
3. Locate types of notification that you want to receive and select the corresponding checkboxes. To display pop-up notifications, select checkboxes in the **Desktop** column. To receive notification in you mailbox, select checkboxes in the **E-mail** column.
4. If necessary, configure additional parameters:

Checkbox	Description
Do not show notifications in full-screen mode	Select this checkbox to hide notifications when an application is running in full screen mode on your computer (e.g. a game or a movie). Clear this checkbox to display notification regardless on the mode.
Display Firewall notification on separate desktop in full-screen mode	Select this checkbox to display notifications from **Firewall** on a separate desktop when some application is running in full screen mode on your computer (a game or a movie). Clear this checkbox to display notification on the same desktop where an application is running in the full screen mode.

5. If you selected one or more e-mail notifications, configure sending e-mails from your computer.
6. After editing, click **OK** to save the changes or **Cancel** to cancel them.

To configure e-mail notifications

1. Make sure that the **Enable notifications** checkbox and all the necessary e-mail notifications are selected in the **Notification parameters** window are selected.
2. Select the **Send notifications by e-mail** checkbox.
3. Click **E-mail settings**. The window with e-mail parameters opens.



4. Specify the following parameters:

Option	Description
E-mail address	Enter an e-mail address where to send the notifications.
SMTP Server	Enter the outgoing (SMTP) server for **Dr.Web Security Space** to use when sending e-mail notifications.
Port	Enter the port for **Dr.Web Security Space** to use when connecting to the e-mail server.
Login	Enter the login for **Dr.Web Security Space** to use when connecting to the e-mail server.
Password	Enter the password to the login that should be used when connecting to the e-mail server.
Security	Select the security level for the connection.
Authentication	Select the authentication method that should be used when connecting to the e-mail server.

5. Click **Test** to send a test message using the provided parameters. If you do not receive the message within several minutes, check the provided connection details.
6. After editing, click **OK** to save the changes or **Cancel** to cancel them.

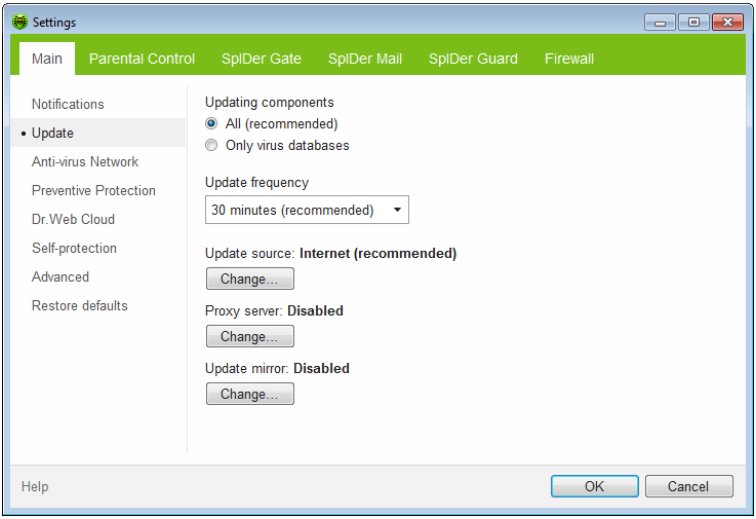
To suspend notifications temporary

To disable sending e-mail notifications, clear the **Send notifications by e-mail** checkbox.

To disable all types of notifications, clear the **Enable notifications** checkbox.

3.2.2. Update Page

On this page, you can configure **Dr.Web Security Space** update parameters such as components that should be updated, an updating source, update period, and update mirror.



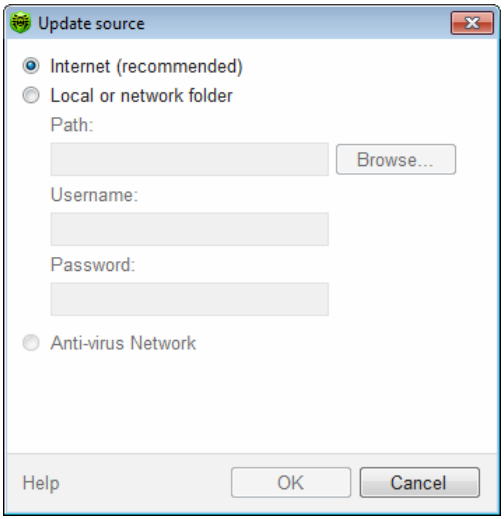
Option	Description
Update source	You can specify a convenient update source.
Updating components	You can choose one of the update modes: • **All (recommended)** – select to download updates to **Dr.Web Security Space** virus databases, engine, and other components. • **Only virus databases** – select to download updates to **Dr.Web Security Space** virus databases and engine; other components are not updated.
Update frequency	You can select frequency for checking of availability of updates.
Proxy server	You can configure connection to a proxy server.

Option	Description
Update mirror	You can create an update mirror that will be used by local network computers with installed **Dr.Web** product.

Update Source

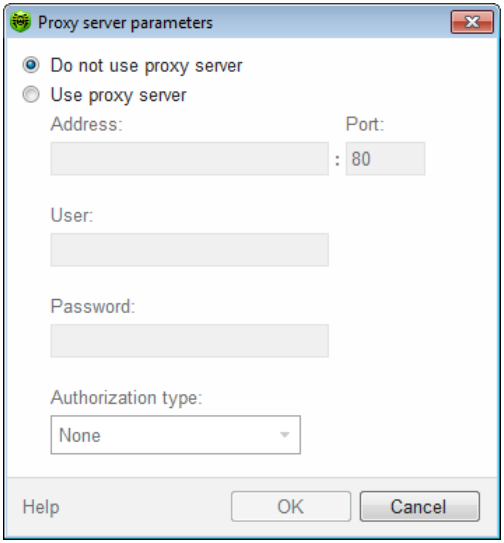
To select an update source, click **Change**. In the opened window select one of the following update sources:

- **Internet (recommended) –** updates are to be downloaded from **Doctor Web** servers. This source is used by default;
- **Local or network folder –** updates are to be downloaded from a local or network folder, where updates were copied. To specify the path to the folder, click **Browse** and select the required folder, or enter the address manually. Enter the user name and password if necessary;
- **Anti-virus Network –** updates are to be downloaded from a local network computer if **Dr.Web Security Space** product is installed and update mirror is created on it.



Proxy Server

By default, all components use direct connection mode. If necessary, you can enable use of a proxy server and specify its connection settings. To do that, click **Change**. The window with proxy server parameters opens.



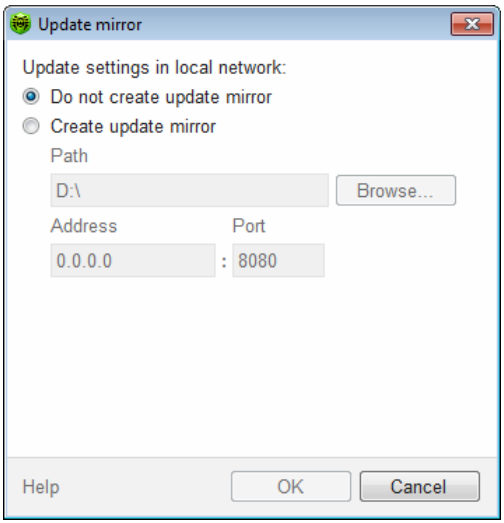
Select **Use proxy server** and specify the following parameters for the proxy connection:

Parameter	Description
Address	Specify the address of the proxy server.
Port	Specify the port of the proxy server.
User	Specify the username to use when connecting to the proxy server.
Password	Specify the password to use when connecting to the proxy server under the provided username.
Authorization type	Select an authorization type required to connect to the proxy server.

After editing, click **OK** to save the changes or **Cancel** to cancel them. To edit the proxy connection settings, click **Change** again.

Update Mirror

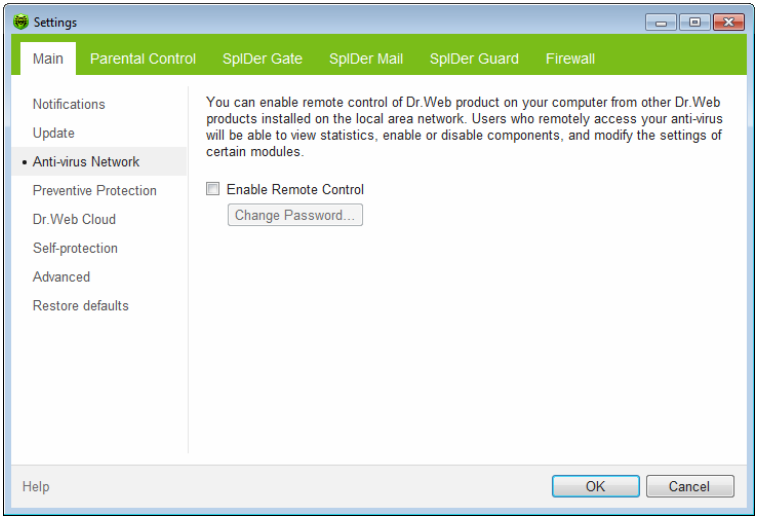
To allow other local network computers with installed **Dr.Web** products to use your computer as an update source, under the **Update mirror** click **Change** and select **Create update mirror** in the opened window. Specify the path to the folder, where updates should be copied. If your computer is connected to several networks, you can specify IP-address available to computers of only one network. You can also specify the port for HTTP connections.



3.2.3. Anti-virus Network

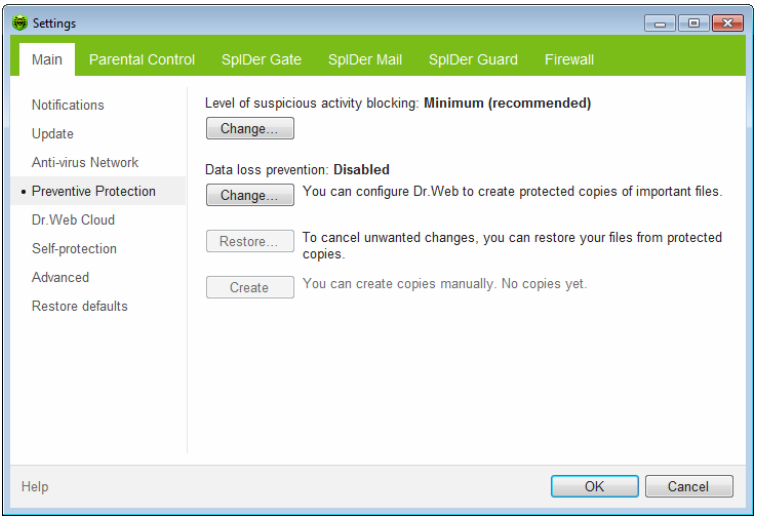
On this page, you can enable remote control of your anti-virus from other local network computers by **Anti-virus Network**. If your computer is connected to an anti-virus network, you can create local update mirrors and control anti-virus protection state or your computer remotely (view statistics, enable or disable **Dr.Web Security Space** components and adjust their settings).

To prevent unauthorized access to **Dr.Web Security Space** settings, set a password for remote control.



3.2.4. Preventive Protection Page

On this page, you can configure **Dr.Web Security Space** reaction to such actions of other programs that can compromise security of your computer. You can also protect your important data from unwanted changes.



Preventive Protection Level

In the default **Minimum** mode, **Dr.Web Security Space** disables automatic changes to system objects, modification of which explicitly signifies a malicious attempt to damage the operating system. It also blocks low-level access to disk and protects the HOSTS file from modification.

If there is a high risk of you computer getting infected, you can increase protection by selecting the **Medium** mode. In this mode, **Dr.Web Security Space** blocks access to the critical objects that can be potentially used by malicious software.

Using this mode may lead to compatibility problems with legitimate software that uses the protected registry branches.

When it is required to have total control of access to critical Windows objects, you can select the **Paranoid** mode. In this mode, **Dr.Web Security Space** also provides you with interactive control over loading of drivers and automatic running of programs.

Protected object	Description
Integrity of running applications	This option allows detection of processes that inject their code into running applications. It indicates that the process may compromise computer security. Processes that are added to the exclusion list of SpIDer Guard are not monitored.
Integrity of users files	This option allows detection of processes that modify user files with the known algorithm which indicates that the process may compromise computer security. Processes that are added to the exclusion list of SpIDer Guard are not monitored. To protect your data from modification, you can enable creation of protected copies that contain important data.
HOSTS file	The operating system uses the HOSTS file when connecting to the Internet. Changes to this file may indicate virus infection.
Low level disk access	Block applications from writing on disks by sectors avoiding the file system.
Drivers loading	Block applications from loading new or unknown drivers.
Critical Windows objects	Other options allow protection of the following registry branches from modification (in the system profile as well as in all user profiles).

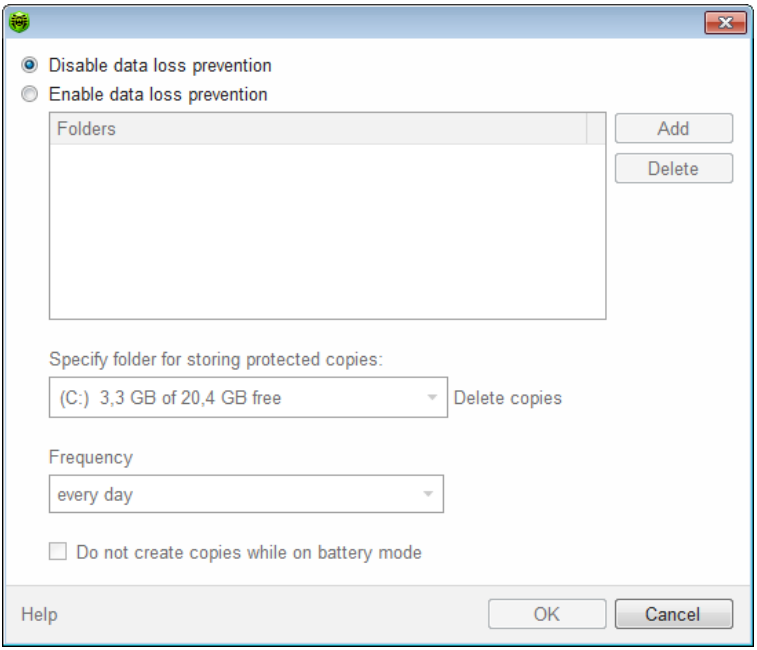
If any problems occur during installation of important Microsoft updates or installation and operation of programs (including defragmentation programs), disable the corresponding options in this group.

Data Loss Prevention

To protect important files from modification by malware, you can enable **Data loss prevention**. This option allows copying of files that reside in the specified folders.

To configure creation of file copies, click **Change**. In the open window, select **Enable data loss prevention**. Click **Add** to specify folders which content is to be copied. You can add a new folder at any time. You can also specify the disk to store the file copies and frequency of their creation. After the specified period, **Dr.Web** will check whether the files in the specified folders were modified. If so, a new copy is created.

Moreover, you can delete the copies if it is required to clear space on the disk (at that, deletion cannot affect the original files) as well as disable creation of protected copies while on Battery mode.

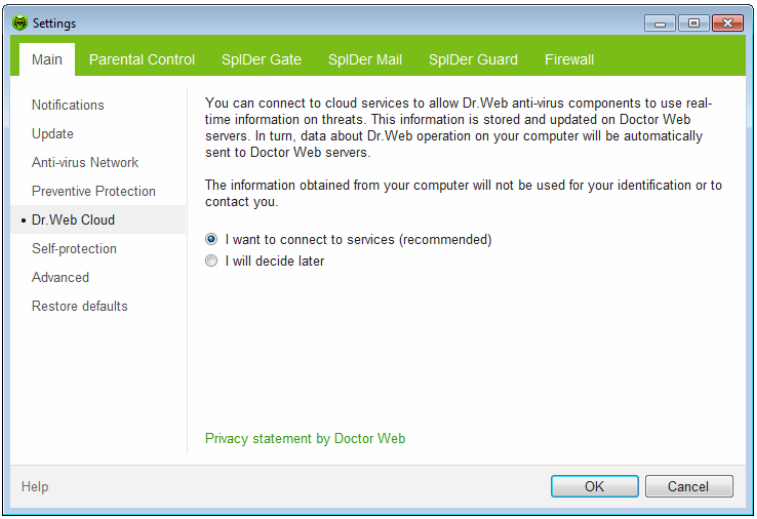


If your files were corrupted, you can restore their copies created by the certain date. For that purpose, click **Restore**. In the open window, select the required date and all copies that were available for the date will be restored to the specified folder.

To start creation of protected copies manually, click **Create** in the main window and configure settings for the new copy.

3.2.5. Dr.Web Cloud Page

On this page, you can connect to **Doctor Web** cloud services and take part in **Dr.Web** quality improvement program.


Settings
Main
Parental Control
SplDer Gate
SplDer Mail
SplDer Guard
Firewall
Notifications
Update
Anti-virus Network
Preventive Protection
Dr.Web Cloud
Self-protection
Advanced
Restore defaults
You can connect to cloud services to allow Dr.Web anti-virus components to use real-time information on threats. This information is stored and updated on Doctor Web servers. In turn, data about Dr.Web operation on your computer will be automatically sent to Doctor Web servers.
The information obtained from your computer will not be used for your identification or to contact you.
I want to connect to services (recommended)
I will decide later
Privacy statement by Doctor Web
Help
OK
Cancel

Cloud Services

Dr.Web Cloud Checker provides most recent information on threats which is updated on **Doctor Web** servers in real-time mode and used for anti-virus protection.

Depending on update settings, information used by anti-virus components may become out of date. Cloud services can reliably prevent users from viewing unwanted websites and protect your system from infected files.

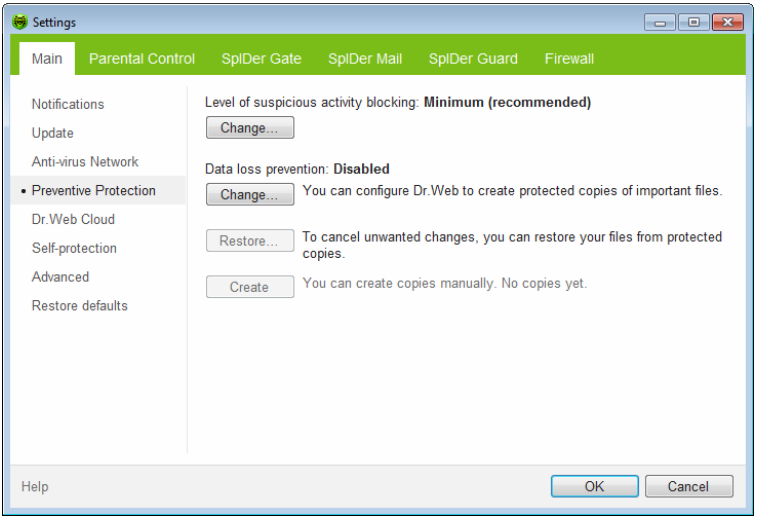
Software Quality Improvement Program

If you participate in the software quality improvement program, impersonal data about **Dr.Web Security Space** operation on your computer will be periodically sent to the company servers, for example, information on created rule sets for **Dr.Web Firewall**. Received information is not used to identify or contact you.

Click the **Privacy statement by Doctor Web** link to look through a privacy statement on **Doctor Web** website.

3.2.6. Self-protection Page

On this page, you can configure protection of **Dr.Web Security Space** itself from unauthorized modification by anti-antivirus programs or accidental damage.



The **Enable Self-protection** option allows to protect **Dr.Web Security Space** files, registry keys and processes from damage and deletion. It is not recommended to disable self-protection.

If any problems occur during operation of defragmentation programs, disable self-protection temporary.

To rollback to a system restore point, disable self-protection.

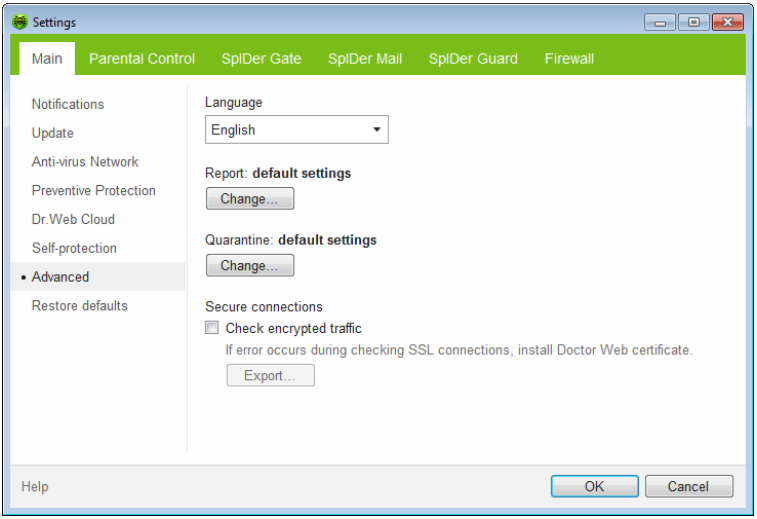
The **Block user-activity emulation** option allows to prevent any automatic changes in **Dr.Web Security Space** operation, including execution of scripts that emulate user interaction with **Dr.Web Security Space** and are launched by the user.

The **Block changing of system date and time** option allows to prevent manual and automatic changes of the system date and time as well as of the time zone. This restriction is set for all system users. The option can improve the performance of the time limit function of **Parental Control**. If Internet or computer usage limits are set in **Parental Control**, this option is automatically enabled. You can configure notification parameters so that to be informed on attempt to change the system time.

The **Protect Dr.Web settings with a password** option allows to s et a password that will be required to access settings of **Dr.Web Security Space**.

3.2.7. Advanced Page

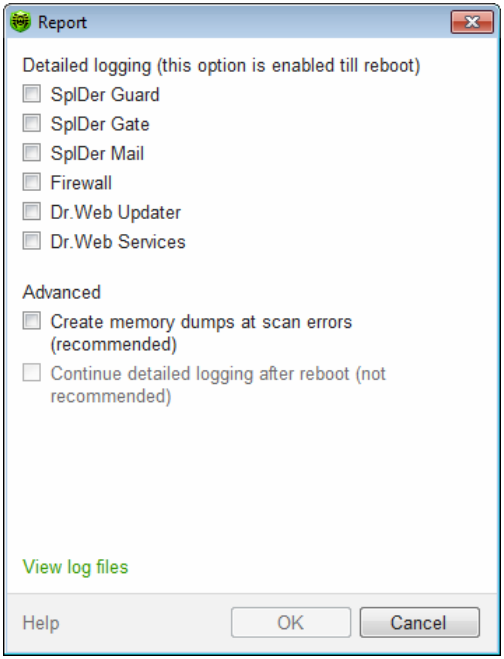
On this page, you can select a language for the settings, configure report and **Quarantine** options, and enable check of encrypted traffic.



In the drop-down list, you can select the language to use in the **Dr.Web Security Space** graphical interface. All available languages are listed automatically.

Report Settings

To configure report settings, click the corresponding **Change** button.



By default, reports are kept in the standard mode and the following information is logged:

Component	Information
SpIDer Guard	Time of updates and **SpIDer Guard** starts and stops, virus events, names of scanned files, names of packers and contents of scanned complex objects (archives, e-mail attachments, file containers). It is recommended to use this mode to determine the most frequent objects scanned by **SpIDer Guard**. If necessary, you can add these objects to the list of exclusions in order to increase computer performance.

Component	Information
SpIDer Mail	Time of updates and **SpIDer Mail** starts and stops, virus events, connection interception settings, names of scanned files, names of packers and contents of scanned archives. It is recommended to use this mode when testing mail interception settings.
SpIder Gate	Time of updates, starts and stops of **SpIDer Gate**, virus events, connection interception settings, names of scanned files, names of packers and contents of scanned archives. It is recommended to use this mode for reception of more detailed information on the checked up objects and work of the HTTP-watchman.
Firewall	**Dr.Web Firewall** does not log its operation in standard mode. When you enable detailed logging, **Firewall** collects data on network packets (pcap logs).
Updater	List of updated **Dr.Web Security Space** files and their downloading states, details on execution of auxiliary scripts, date and time of updates, details on **Dr.Web Security Space** components restarting after update.
Dr.Web Services	Information on **Dr.Web** components, changing of **Dr.Web** components settings, components starts and stops, preventive protection events, connections to anti-virus network.

To view log files

To view log files, click on **View log files.**

Memory dump creation

The **Create memory dumps at scan errors (recommended)** option allows to save maximum of useful information on reasons behind failures of **Dr.Web Security Space** components. This helps **Doctor Web Technical Support** specialists analyze an occurred problem in detail and find a solution. It is recommended to enable this option when operational errors occur.

To enable detailed logging

Logging detailed data on **Dr.Web Security Space** operation may result in considerable log growth and increase in process load. It is recommended to use this mode only when errors occur or by request of **Doctor Web** Technical Support.

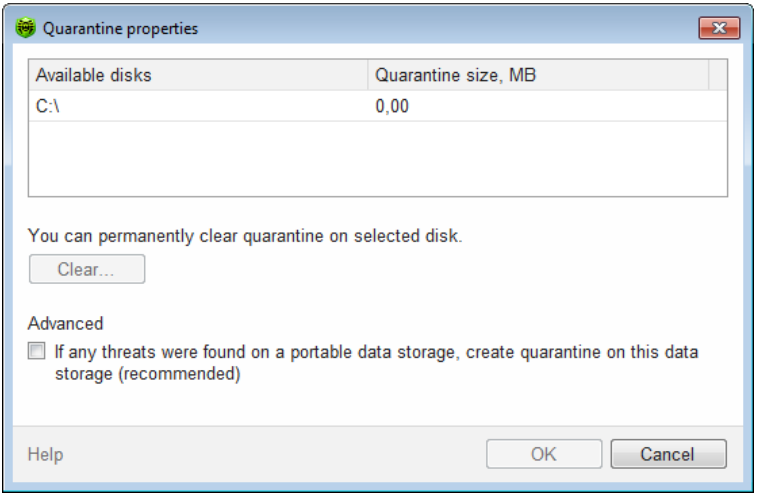
1. To enable detailed logging for a **Dr.Web Security Space** component, set the corresponding checkbox
2. By default, detailed logging mode is used before the first restart of the operating system. If it is necessary to log component activity before and after the restart, set the **Continue detailed logging after reboot (not recommended)** checkbox.
3. Save the changes.

By default, size of log files are restricted to 10 MB.

Quarantine settings

To configure **Quarantine** settings, click the corresponding **Change** button.

You can configure Dr.Web Security Space Quarantine, estimate its size, and delete isolated files from a specified logical drive. Folders of **Quarantine** are created separately on each logical drive where suspicious files are found.



To empty Quarantine

1. To remove all quarantined files on a particular drive, select the drive in the list.
2. Click **Clear** and confirm the deletion when prompted.

Use **Advanced** settings to select the mode of isolating infected objects detected at portable data carriers. By default, detected threats are moved to the **Quarantine** folder on this data carrier without being encrypted. The **Quarantine** folder is created on portable data carriers only when they are accessible for writing. The use of separate folders and omission of encryption on portable data carriers prevents possible data loss.

Secure Connections

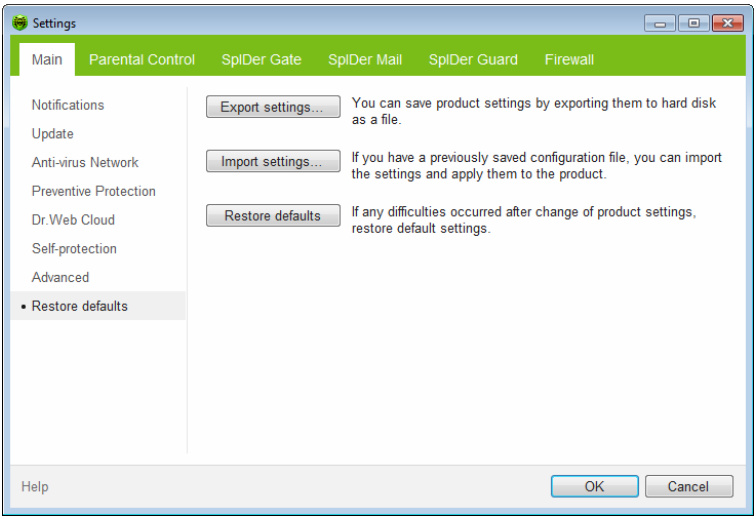
You can enable scanning of data transmitted via secure protocols. To check such data, select the **Check encrypted traffic** checkbox. If your client application that uses secure connections does not refer to the default Windows system certificate storage, then you need to export certificate.

Doctor Web Certificate

You may need to scan data transmitted in accordance with SSL protocol. For instance, you can set **SpIDer Gate** to check encrypted data transmitted via HTTPS protocol, or set **SpIDer Mail** to receive and send messages via POP3S, SMTPS, or IMAPS. These protocols use encrypted SSL connections. In order for **Dr.Web** to scan such encrypted traffic and maintain transparent integration with some browsers and mail clients that do not refer to the Windows system certificate storage, it may be necessary to import **Doctor Web SSL certificate** into the application certificate storages. To save the certificate from the system storage for future use in third party applications, click **Export** and select a convenient folder.

3.2.8. Restore Page

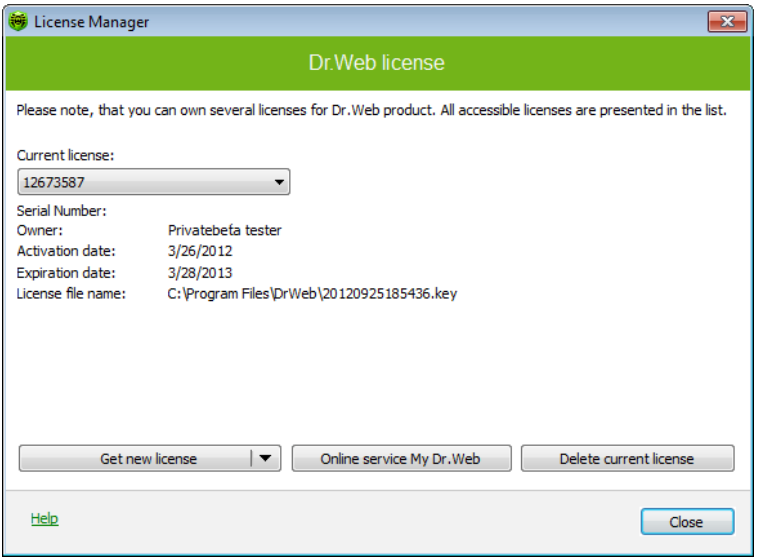
On this page, you can restore all **Dr.Web Security Space** settings to their default values as well as export settings or import them.



3.3. License Manager

License Manager shows information from the **Dr.Web Security Space** key files in an understandable form.

To open **License Manager**, click the **SpIDer Agent** icon in the notification area, select **Tools**, and then select **License Manager**.



The **Online service My Dr.Web** item opens your personal webpage on the official **Dr.Web Security Space** website. This page gives information about your license (period of usage, serial number), allows to renew your license, contact Technical Support, etc.

To start the registration procedure for receiving the key file from **Doctor Web** servers, click **Get new licence** and select **from Internet** in the drop-down menu. That launches key file obtaining.

To add a key file

1. Click **Get new licence**. In the drop-down menu, select **from file**.
2. Select the file in a standard window.
3. **Dr.Web Security Space** starts using the key file automatically.

If you received a key file during installation or in the distribution kit complete set, installation of a key file is made automatically and does not demand any additional actions.

To delete a key file from a list, select it and click **Delete current licence**. Last used key cannot be removed.

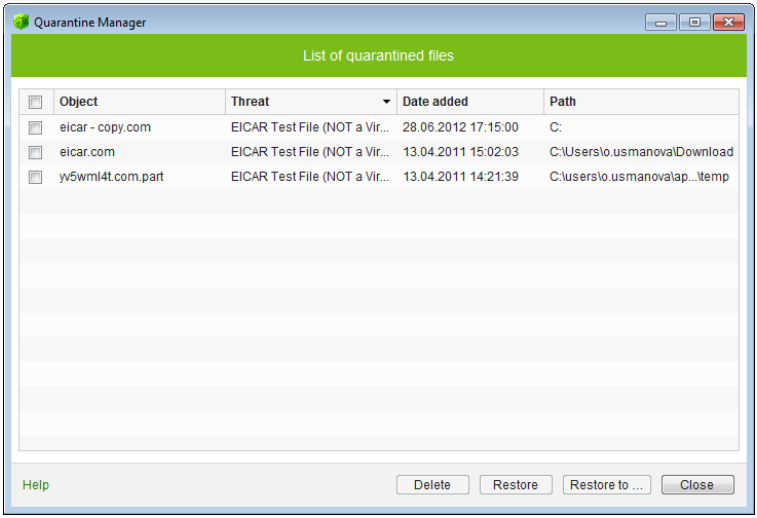
By default, the license key file should be located in the **Dr.Web Security Space** installation folder. **Dr.Web Security Space** verifies the file regularly. Do not edit or otherwise modify the file to prevent the license from compromise.

If no valid license or demo key file is found, **Dr.Web Security Space** components are blocked. To receive a valid key file, select **Register License** in the context menu of the **SpIDer Agent** .

3.4. Quarantine Manager

The **Quarantine** section of **Dr.Web Security Space** serves for isolation of files that are suspicious as malware. **Quarantine** folders are created separately on each logic disk where suspicious files are found. When infected objects are detected at the portable data carrier accessible for writing, the Quarantine folder will be created on the data carrier and infected objects will be moved to this folder.

To open **Quarantine Manager**, click the **SpIDer Agent** icon in the notification area, select **Tools**, and then select **Quarantine Manager**.



The central table lists the following information on quarantined objects that are available to you:

- **Object** – name of the quarantined object
- **Threat** – malware class of the object, which is assigned by **Dr.Web Security Space** when the object is quarantined

- **Date added** – the date and time when the object was moved to **Quarantine**
- **Path** – full path to the object before it was quarantined

Quarantine displays objects which can be accessed by your user account.

To view hidden objects, open the **Dr.Web Security Space** installation folder and run the dwqrui.exe file under a more privileged account, or run **Dr.Web Security Space** under an administrative account.

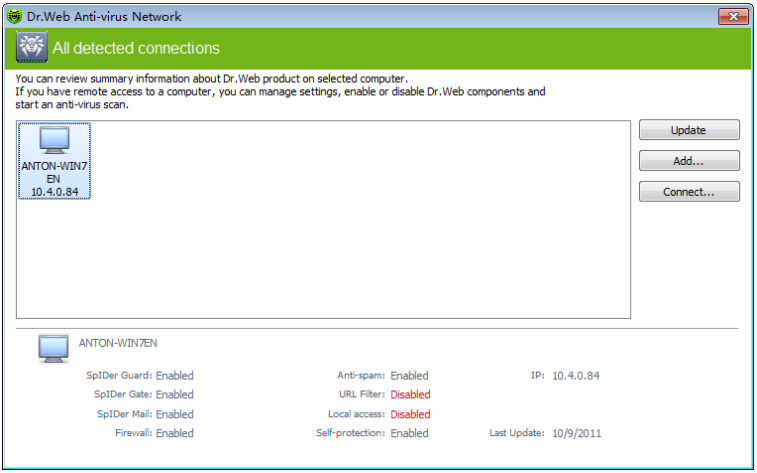
To manage quarantined objects

1. Select checkboxes for one or more objects that you want to manage.
2. Click one of the following buttons to apply the necessary action:

Button	Description
Restore	Removes the selected objects from the quarantine and restores them to their original location (the folder where the object had resided before it was moved to the quarantine). Use this option only when you are sure that the selected objects are not harmful.
Restore to	Removes the selected objects from the quarantine and restores them to selected location. Use this option only when you are sure that the selected objects are not harmful.
Delete	Deletes the selected objects from the quarantine and from the system.

3.5. Anti-virus Network

This section allows to manage version 9.0 of **Dr.Web Anti-virus for Windows**, **Dr.Web Anti-virus for Windows Servers**, or **Dr.Web Securitry Space** on other computers of your network. To access **Dr.Web Security Space** remote control, in the context menu of the **SpIDer Agent** icon in the taskbar notification area, select **Tools**, and then select **Anti-virus Network** item.



To access remote anti-virus, select a computer in the list and click **Connect**. Enter password specified in settings of the remote anti-virus. An icon for the remote **SpIDer Agent** appears in the Windows notification area. The user of the remote anti-virus will be notified about remote connection. The following items to configure and manage remote **Dr.Web Security Space** are available (set of components depends on which **Dr.Web product** is installed):

- **About**
- Register license
- **My Dr.Web**
- **Help**

- SpIDer Guard
- SpIDer Mail
- SpIDer Gate
- Parental Control
- Firewall
- **Tools**
- Update
- **Enable/Disable Self-protection**

The **Tools** item opens a submenu that provides access to:

- License Manager
- **Dr.Web Security Space** settings
- Report generation wizard

You can manage settings, enable or disable components, and look through statistics.

Anti-virus Network, **Quarantine Manager** and **Scanner** are not available. **Firewall** settings and statistics are not available as well, but you can enable or disable **Firewall** (if you accessed **Dr.Web Anti-virus** or **Dr.Web Security Space**). Also you can select the **Disconnect** item to terminate remote connection.

If required computer is not on the list, you can try to add it manually. For this, click **Add** button and enter IP-address.

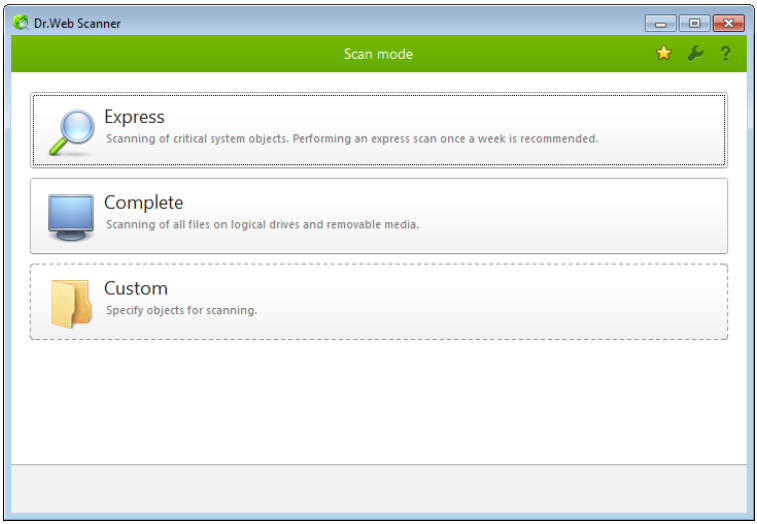
You can establish only one connection with remote **Dr.Web product**. If one connection is already established, the **Connect** button is disabled.

Computers are listed in **Anti-virus Network** if **Dr.Web** products installed on these computers allow remote connection. You can allow connection to your **Dr.Web Security Space** on the **Anti-virus Network** page in Main settings.

This option is not available in User mode.

4. Dr.Web Scanner

By default, the program scans all files for viruses using both the virus database and the heuristic analyzer (a method based on the general algorithms of virus developing allowing to detect the viruses unknown to the program with a high probability). Executable files compressed with special packers are unpacked when scanned. Files in archives of all commonly used types (ACE, ALZIP, AR, ARJ, BGA, 7-ZIP, BZIP2, CAB, GZIP, DZ, HA, HKI, LHA, RAR, TAR, ZIP, etc.), in containers (1C, CHM, MSI, RTF, ISO, CPIO, DEB, RPM, etc.), and in mailboxes of mail programs (the format of mail messages should conform to RFC822) are also checked.


Dr.Web Scanner
Scan mode
Express
Scanning of critical system objects. Performing an express scan once a week is recommended.
Complete
Scanning of all files on logical drives and removable media.
Custom
Specify objects for scanning.

By default, **Dr.Web Scanner** uses all detection methods to detect viruses and other malicious software. Information on all infected or suspicious objects displays in the table where you can manually select a necessary action.

The default settings are optimal for most cases. However, if necessary, you can modify actions suggested upon threat detection by using **Dr.Web Scanner** settings window. Please note that you can set custom action for each detected threat after scan is completed, but common reaction for a particular threat type should be configured beforehand.

4.1. Scanning Your System

Dr.Web Scanner is installed as a usual Windows application and can be launched by the user or automatically (see Automatic Launch of Scanning).

It is recommended for the scanner to be run by a user with administrator rights because files to which unprivileged users have no access (including system folders) are not scanned.

To launch Scanner

Do one of the following:

- Click the **Dr. Web Scanner** icon on the Desktop.
- Click the **Scanner** item in the context menu of the **SpIDer Agent** icon in the taskbar notification area (see SpIDer Agent chapter).
- Click the **Dr.Web Scanner** item in **All Programs** → **Dr.Web** directory of the Windows **Start** menu.
- Run the corresponding command in the Windows command line (read Command Line Scanning Mode).

When **Scanner** launches, its main window opens.

There are 3 scanning modes: **Express scan, Complete scan** and **Custom scan.** Depending on the selected mode, either a list of objects which will be scanned or a file system tree is displayed at the center of the window.

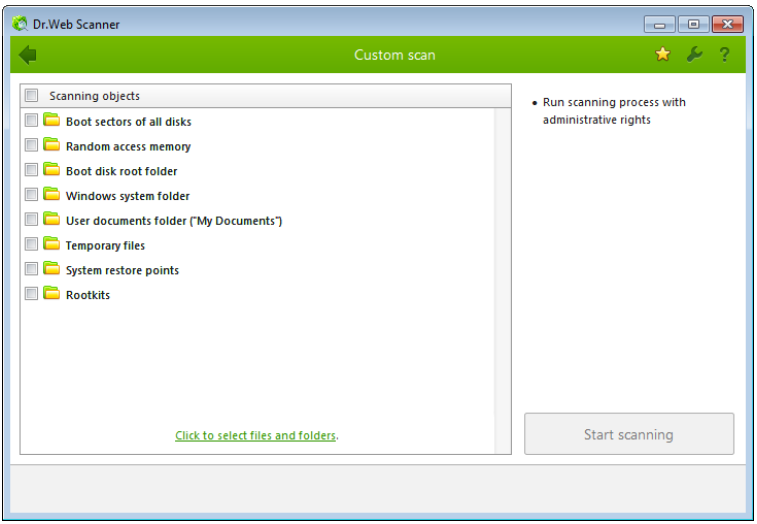
In **Express scan** mode the following objects are scanned:

- Boot sectors of all disks
- Random access memory
- Boot disk root folder
- Windows system folder
- User documents folder ("My documents")
- Temporary files

- System restore points
- Rootkits (if scanning process is running under administrative privileges)

If **Complete scan** mode is selected, random access memory and all hard drives (including boot sectors of all disks) are scanned. **Scanner** also runs a check on rootkits.

Custom scan mode allows you to select objects for scanning: any folders and files, and such objects as random access memory, autorun objects, boot sectors, etc. To start scanning selected objects, click **Start scanning**.



When scanning starts, **Pause** and **Stop** buttons become available. You can do the following:

- to pause scanning, click **Pause** button. To resume scanning after pause, click **Resume** button;
- to stop scanning, click **Stop** button.

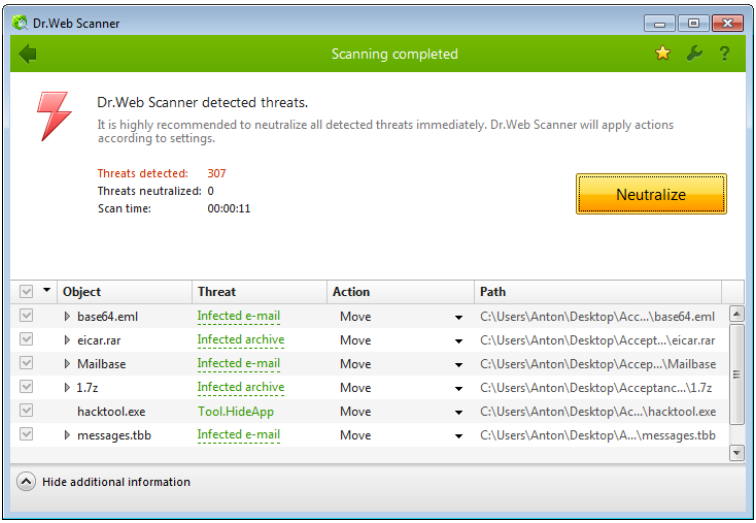
The **Pause** button is not available at scanning processes and RAM.

4.2. Neutralizing Detected Threats

By default, if known viruses or computer threats of other types are detected during scanning, **Dr.Web Scanner** informs you about them. You can neutralize all detected threats at once by clicking **Neutralize**. In this case **Dr.Web Scanner** applies the most effective actions according its configuration and threat type.

Threats to your security can be neutralized either by restoring the original state of each infected objects (*curing*), or, when curing is impossible, by removing the infected object completely from your operating system (*deleting*).

By clicking **Neutralize** you apply actions to the objects selected in the table. **Dr.Web Security Space** selects all objects by default once scanning completes. When necessary, you can customize selection by using checkboxes next to object names or threat categories from the drop-down menu in the table header.



To select an action

1. Where necessary, select a custom action from the drop-down list in the **Action** field. By default, **Scanner** selects a recommended action for the type of detected threat.
2. Click **Neutralize**. **Scanner** applies all selected actions to the selected threats.

Suspicious objects are moved to **Quarantine** and should be sent for analysis to the anti-virus laboratory of **Doctor Web**. To send the files, right-click anywhere in the **Quarantine** windows and select **Submit file to Doctor Web Laboratory**.

There are some limitations:

- For suspicious objects curing is impossible.
- For objects which are not files (boot sectors) moving and deletion are impossible.
- For files inside archives, installation packages or attachments, no actions are possible.

The detailed report on **Dr.Web Scanner** operation is stored in the dwscanner.log file that resides in the %USERPROFILE%\Doctor Web folder.

4.3. Scanner Settings

It is recommended for **Scanner** to be run by a user with administrator privileges because files to which unprivileged users have no access (including system folders) are not scanned.

Default program settings are optimal for most applications and they should not be modified, if there is no special need for it.

To configure Scanner

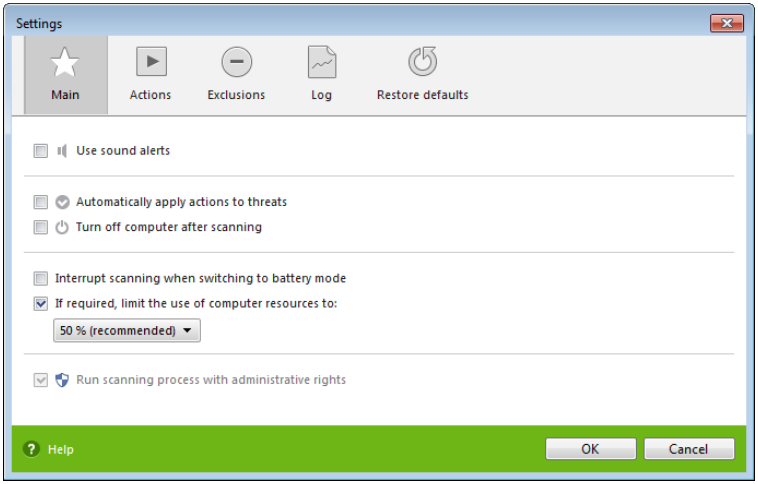
1. To open **Scanner** settings, click the **Settings** icon on the toolbar. This opens the **Settings** window which contains several tabs.
2. Make the necessary changes.
3. For more detailed information on the settings specified in each tab use the **Help** button.
4. When editing is finished, click **OK** to save the changes made or **Cancel** to cancel the changes.

Main Page

On this tab you can set general parameters of **Scanner** operation.

You can enable sound notifications on particular events, set **Scanner** to apply recommended actions to detected threats automatically, and configure **Scanner** interaction with the operating system.

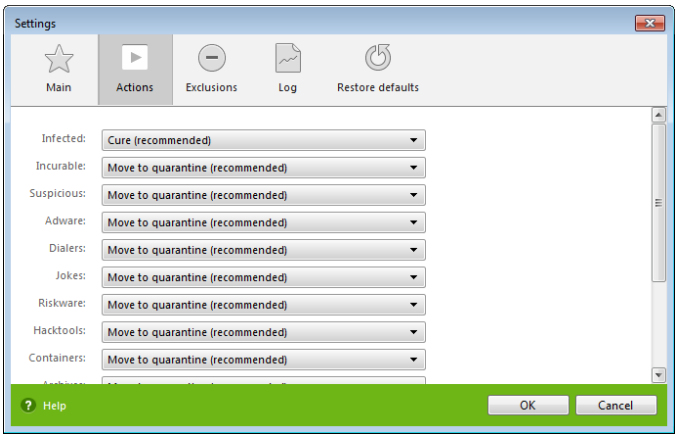
It is recommended to run **Scanner** under an account with administrative privileges. Otherwise, all folders and files that are not accessible to unprivileged user including system folder are not scanned. To run **Scanner** under an administrative account, select the **Run scanning process with administrative rights** checkbox.



Actions Page

To set reaction on threat detection

1. Select the **Actions** tab in the **Scanner settings** window.



2. In the **Infected objects** drop-down list, select the program's action upon detection of an infected object.

The **Cure** action is the best in most cases.

3. Select the program's action upon detection of an incurable object in the **Incurable objects** drop-down list. The range of actions is the same as for infected objects, but the **Cure** action is not available.

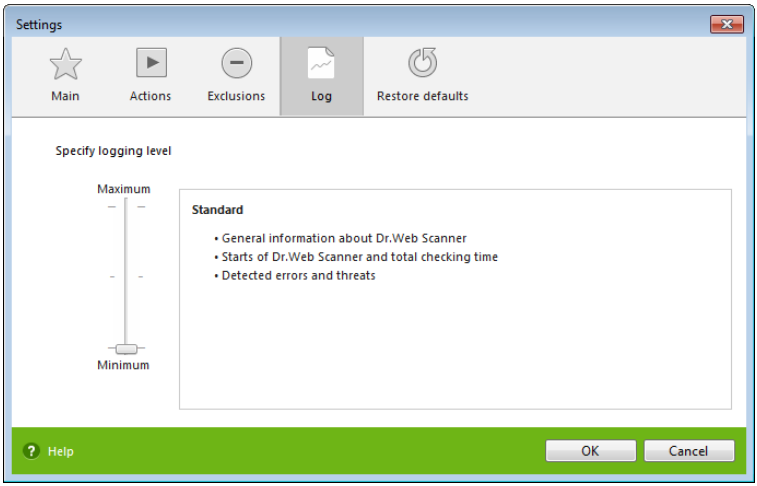
The **Move to quarantine** action is the best in most cases.

4. In the **Suspicious objects** drop-down list select the program's action upon detection of a suspicious object (fully similar to the previous paragraph).

5. Similar actions should be specified for detection of objects containing Adware, Dialers, Jokes, Riskware and Hacktools.
6. The same way the automatic actions of the program upon detection of viruses or suspicious codes in file archives, installation packages and mailboxes, applied to these objects as a whole, are set up.
7. To cure some infected files it is necessary to reboot Windows. You can choose one of the following:
   - **Restart computer automatically**. It can lead to loss of unsaved data.
   - **Prompt restart**

Log Page

In the **Log** page you can set up the parameters of the log file.



Most parameters set by default should be left unchanged. However, you can change the details of logging (by default, the information on infected or suspicious objects is always logged; the information on the scanned packed files and archives and on successful scanning of other files is omitted).

4.4. Scanning in Command Line Mode

You can run **Scanner** in the command line mode, then you can specify settings of the current scanning session and list objects for scanning as additional parameters. This mode provides automatic activation of **Scanner** according to schedule. Automatic activation of the **Scanner** according to schedule is performed in this mode.

To run scanning from command line

Enter a command in the following format:

[*<path_to_program>*] `drweb32w` [*<objects>*] [*<switches>*]

The list of objects for scanning can be empty or contain several elements separated with blanks.

The most commonly used examples of specifying the objects for scanning are given below:

- `/FAST` perform an express scan of the system (for more information on the express scan mode see Scan Modes).
- `/FULL` perform a full scan of all hard drives and removable data carriers (including boot sectors).
- `/LITE` perform a basic scan of random access memory, boot sectors of all disks and startup objects.

Switches are command line parameters that specify program settings. If no switches are defined, scanning is performed with the settings specified earlier (or with the default settings if you have not changed them).

Each switch begins with a forward slash (`/`) character and is separated with a blank from other switches.

4.5. Console Scanner

Dr.Web Security Space also includes **Console Scanner** that provides advanced settings.

Console Scanner moves suspicious files to **Quarantine**.

To run Console Scanner

Enter the following command:

[*<path_to_program>*] `dwscancl` [*<switches>*] [*<objects>*]

The list of objects for scanning can be empty or contain several elements separated with blanks.

Switches are command line parameters that specify program settings. Several parameters are divided by spaces. For the full list of available switches, refer to Appendix A.

Return codes:

- 0 – Scanning was completed successfully, infected objects were not found
- 1 – Scanning was completed successfully, infected objects were detected
- 10 – Invalid keys are specified
- 11 – Key file is not found or does not license **Console Scanner**
- 12 – **Scanning Engine** did not start
- 255 – Scanning was aborted by user

4.6. Automatic Launch of Scanning

During **Dr.Web Security Space** installation an anti-virus scanning task is automatically created in the **Task Scheduler** (the task is disabled by default).

To view the parameters of the task, open **Control Panel** → **Administrative Tools** → **Task Scheduler**.

In the task list select the **Dr.Web Daily scan** task. You can enable the task, adjust trigger time and set required parameters.

On the **General** tab you can review general information and security options on a certain task. On the **Triggers** and **Conditions** tabs various conditions for task launching are specified. To review event log, select the **History** tab.

You can also create your own anti-virus scanning tasks. Please refer to the Help system and Windows documentation for more details on the system scheduler operation.

If installed components include **Dr.Web Firewall**, **Task Scheduler** will be blocked by **Firewall** after **Dr.Web Security Space** installation and the first system reboot. Scheduled tasks will operate only after second restart when new rule is already created.

5. SpIDer Guard

SpIDer Guard is an anti-virus monitor that resides in main memory, checks files and memory on the fly, and detects virus-like activity.

By default, **SpIDer Guard** is loaded automatically at every Windows startup and cannot be unloaded during the current Windows session.

Only the user with administrator rights can temporarily disable **SpIDer Guard**.

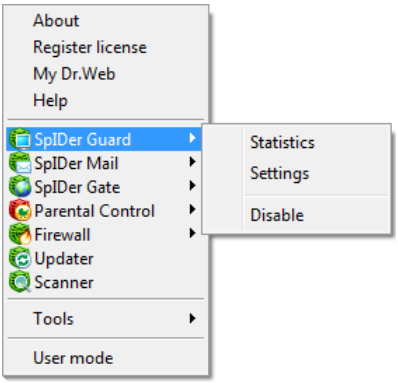
By default, **SpIDer Guard** performs on-access scanning of files that are being created or changed on the HDD and all files that are opened on removable media. It scans these files in the same way as the **Scanner** but with "milder" options. Besides, **SpIDer Guard** constantly monitors running processes for virus-like activity and, if they are detected, blocks these processes.

By default, upon detection of infected objects **SpIDer Guard** supplied with **Dr.Web Security Space** acts according to actions set on the Actions tab.

You can set the program's reaction to virus events by adjusting the corresponding settings. A user can control it with the help of the **Statistics** window and the log file.

5.1. Managing SpIDer Guard

Main tools for setting and managing in **SpIDer Guard** reside in its menu.



The **Statistics** menu item allows to open the **Statistics** window, where the information on the operation of **SpIDer Guard** during the current session is displayed (the number of scanned, infected or suspicious objects, virus-like activities and actions taken).

The **Settings** menu item opens **SpIDer Guard** settings window (for details, see SpIDer Guard Settings).

The **Disable** item allows to temporary disable program functions (for users with administrator rights only).

Settings and **Disable**/**Enable** items are not available in User mode.

To disable **SpIDer Guard**, enter confirmation code or password (if you set **Protect Dr.Web settings by password** checkbox on the **Self-protection** page in **Dr.Web Security Space** Main settings).

You can restore settings to their default values on the **Restore defaults** page of **Dr.Web Security Space** Main settings.

5.2. SpIDer Guard Settings

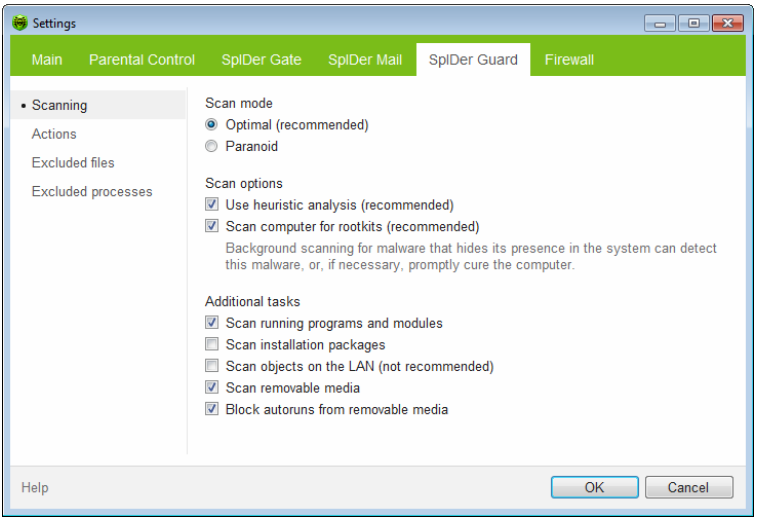
The main adjustable parameters of **SpIDer Guard** are in the **Settings** panel. To receive help on parameters specified on a page, select that page and click **Help**.

When you finish editing the parameters click **OK** to save changes or **Cancel** to cancel the changes made.

Some of the most frequently changed settings of the program are described below.

Scanning Page

By default, **SpIDer Guard** is set in **Optimal** mode to scan files that are being executed, created or changed on the hard drives and all files that are opened on removable media.



When you attempt to execute an EICAR test file while **SpIDer Guard** is running in the **Optimal** mode, the operation is not terminated and the file is not processed as malicious since it does not pose any actual threat to your system. However, if you copy or create such a file in your system, then it is detected by **SpIDer Guard** and moved to **Quarantine** by default.

In **Paranoid** mode **SpIDer Guard** scans files that are being opened, created or changed on the hard drives, on removable media and network drives.

Selecting the **Use heuristic analysis** checkbox enables the heuristic analyser mode (a method of virus detection based on the analysis of actions specific for viruses).

You can also enable background scanning of your operating system for rootkits, i.e. malicious programs that are used for hiding changes to operating system such as running of particular processes, registry changes, modifications to files and folders.

Anti-rootkit component included in **Dr.Web Security Space** provide options for background scanning of the operating system for complex threats and curing of detected active infections when necessary.

If this option is enabled, **Dr.Web Anti-rootkit** constantly resides in memory. In contrast to on-the-fly scanning of files by **SpIDer Guard**, scanning for rootkits includes checking of autorun objects, running processes and modules, Random Access Memory (RAM), MBR/VBR disks, computer BIOS system and other system objects.

One of the key features of the **Dr.Web Anti-rootkit** is delicate attitude towards consumption of system resources (processor time, free RAM and others) as well as consideration of hardware capacity.

When **Dr.Web Anti-rootkit** detects a threat, it notifies you on detection and neutralizes the malicious activity.

During background rootkit scanning, files and folders specified on Excluded files page of **SpIDer Guard** are excluded from scanning.

To enable background scanning, set the **Scan computer for rootkits (recommended)** checkbox.

Disabling of **SpIDer Guard** does not affect background scanning. If background scanning is enabled, it is performed regardless of whether **SpIDer Guard** is enabled or disabled.

In **Additional tasks** group, you can configure **SpIDer Guard** parameters to check the following objects:

- Executables of running processes regardless of their location
- Installation files
- Files on network drives
- Files and boot sectors on removable devices

These parameters are applied in any scan mode.

Certain external devices (e.g. mobile drives with USB interface) can be identified by the system as hard drives. That is why such devices should be used with utmost care and checked for viruses by the **Scanner** when connected to a computer.

Disabled scanning of archives, even if **SpIDer Guard** is constantly active, means that viruses can still easily penetrate a PC but their detection will be postponed. When the infected archive is unpacked (or an infected message is opened), an attempt to write the infected object on the hard drive will be taken and **SpIDer Guard** will inevitably detect it.

Also you can select **Block autoruns from removable media** check box to disable autoplay option for portable data storages such as CD/DVD, flash memory etc. This option helps to protect you computer from viruses transmitted via removable media.

If any problem occur during installation with autorun option, it is recommended to remove **Block autoruns from removable media** check box.

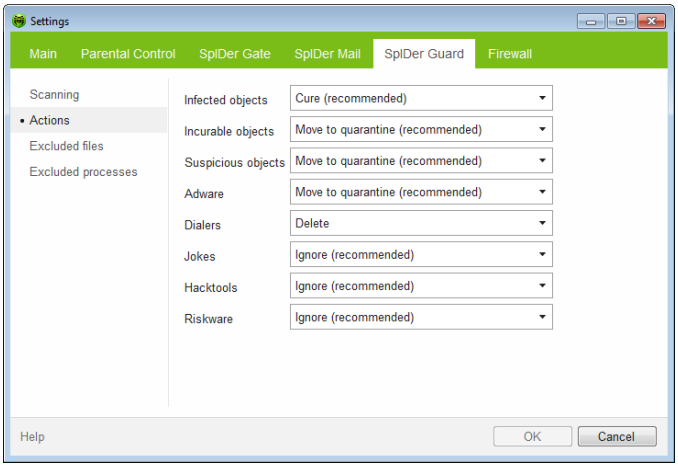
Actions Page

On this page, you can adjust **SpIDer Guard** reaction to infected objects.

The **Cure**, **Ignore**, **Delete** and **Move to quarantine** actions are similar to those of the **Scanner**. All actions with files are described in Appendix B. Computer Threats and Neutralization Methods chapter.

To change the default actions in SpIDer Guard

1. In the **SpIDer Guard Settings** window select the **Actions** tab.



2. In the **Infected objects** drop-down list select the program's action upon detection of an infected object. **Cure** action is recommended.
3. In the **Incurable objects** drop-down list select the program's action upon detection of an incurable object. **Move to quarantine** action is recommended.

4. In the **Suspicious objects** drop-down list select the program's action upon detection of a suspicious object. **Move to quarantine** action is recommended.
5. In the **Adware** and **Dialers** drop-down lists select the program's action upon detection of dangerous files. **Move to quarantine** action is recommended.
6. The same procedure is used when setting the program's actions upon detection of objects containing jokes, riskware and hacktools. **Ignore** action is recommended.
7. Click **OK** to apply changes and close the **SpIDer Guard Settings** window.

Excluded files Page

On the **Excluded files** page folders and files to be excluded from checking are specified.

In the **Excluded files and folders** field the list of folders and files to be excluded from scanning can be set. These can be the quarantine folder of the anti-virus, some program folders, temporary files (swap files), etc.

The list is empty by default. To add a file, folder or mask to the list type its name into the entry field and click **Add**. To enter an existing file name or folder, or edit the path in the field before adding it to the list you can click **Browse** to the right and select the object in a standard file browsing window.

To remove a file or folder from the list select it in the list and click **Remove**.

Excluded processes Page

On the **Excluded Processes Page** page you can specify a list of processes to be excluded from scanning.

6. SpIDer Mail

SpIDer Mail is an anti-virus mail scanner that installs by default and monitors data exchange between mail clients and mail servers made via POP3, SMTP, IMAP4, or NNTP (IMAP4 stands for IMAPv4rev1) protocols.

Any incoming messages are intercepted by **SpIDer Mail** before they are received by the mail client. They are scanned for viruses with the maximum possible level of detail. If no viruses or suspicious objects are found they are passed on to the mail program in a "transparent" mode, as if it was received immediately from the server. Similar procedure is applied for outgoing messages before they are sent to servers.

By default, the program's reaction upon detection of infected incoming messages, as well as messages that were not scanned (e.g. due to their complicated structure) is as follows:

- Messages infected with a virus are not delivered; the mail program receives an instruction to delete this message; the server receives a notification that the message had been received (this action is called *deletion* of the message).
- Messages with suspicious objects are moved to the quarantine folder as separate files; the mail program receives a notification about this (this action is called *moving* the message).
- Messages that were not scanned and safe messages are passed on.
- All deleted or moved messages remain on the POP3 or IMAP4 server.

Infected or suspicious outgoing messages are not sent to the server; a user is notified that a message will not be sent (usually the mail program will save it).

If an unknown virus distributing through e-mail is resided on the computer, the program can detect signs of a typical "behavior" for such viruses (mass distribution). By default, this option is enabled.

SpIDer Mail uses **Dr.Web Anti-spam** technologies which allows to scan mail for spam messages. By default, this option is enabled. (For information on settings of the spam filter, refer to Anti-spam Page).

The default program settings are optimal for a beginner, provide maximum protection level and require minimum user interference. But some options of mail programs are blocked (for example, sending a message to many addresses might be considered as mass distribution and mail will not be scanned for spam), useful information (from their safe text part) becomes unavailable if messages are automatically destroyed. Advanced users can modify mail scanning parameters and the program's reactions to virus events.

Dr.Web Scanner can also detect viruses in mailboxes of several formats, but **SpIDer Mail** has several advantages:

- Not all formats of popular mailboxes are supported by **Dr.Web Scanner**. In this case, when using **SpIDer Mail**, the infected messages are not even delivered to mailboxes.
- The **Scanner** does not check the mailboxes at the moment of the mail receipt, but either on user demand or according to schedule. Furthermore, this action is rather resource-consuming and takes a lot of time.

Thus, with all the components in their default settings, **SpIDer Mail** detects viruses and suspicious objects distributed via e-mail first and does not let them infiltrate into your computer. Its operation is rather resource-sparing; scanning of e-mail files can be performed without other components.

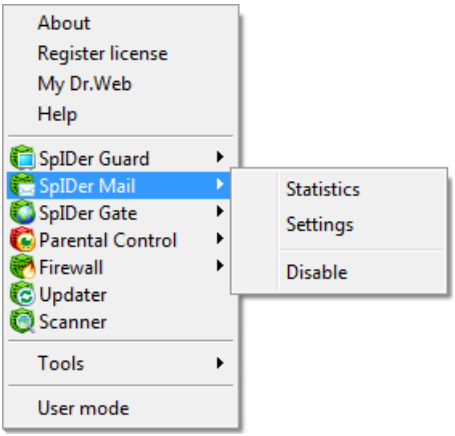
Anti-spam

Dr.Web Anti-spam technologies consist of several thousand rules that can be divided into several groups:

- **Heuristic analysis** – a highly intelligent technology that empirically analyzes all parts of a message: header, message body, and attachments, if any.
- **Detection of evasion techniques** – this advanced anti-spam technology allows detecting evasion techniques adopted by spammers to bypass anti-spam filters.
- **HTML-signature analysis** – messages containing HTML code are compared with a list of known patterns from the anti-spam library. Such comparison, in combination with the data on sizes of images typically used by spammers, helps protect users against spam messages with HTML-code linked to online content.
- **Semantic analysis** – the words and phrases of a message – both visible to the human eye and hidden – are compared with words and phrases typical of spam using a special dictionary.
- **Anti-scamming** – scam (as well as pharming messages) is the most dangerous type of spam including so-called "Nigerian" scams, loan scams, lottery and casino scams and false messages from banks and credit organizations. A special module of **Dr.Web Anti-spam** is used to filter scams.
- **Technical spam** – bounces are delivery-failure messages sent by a mail server. Such messages are also sent by a mail worm. Therefore bounces are as unwanted as spam.

6.1. Managing SpIDer Mail

SpIDer Mail can be managed via the **SpIDer Mail** item in the context menu of the **SpIDer Agent** icon (see SpIDer Agent).



If the **Settings** menu item is selected, a window with **SpIDer Mail** settings will open (read Adjusting Certain Program Settings).

If the **Statistics** menu item is selected, a window with information on the program's operation during current session (the number of scanned, infected, suspicious objects and taken actions) will open.

The **Disable**/**Enable** item allows to start/stop **SpIDer Mail**.

Settings and **Disable**/**Enable** items are not available in User mode.

You can restore settings to their default values on the **Restore defaults** page of **Dr.Web Security Space** Main settings.

6.2. SpIDer Mail Settings

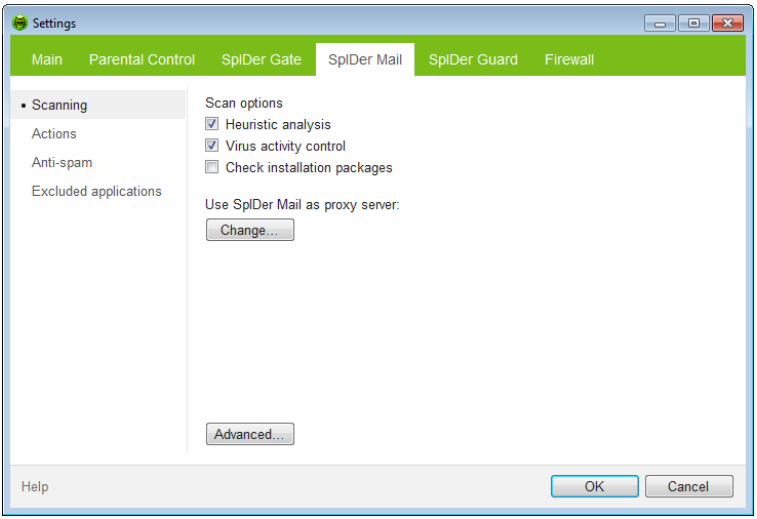
To modify **SpIDer Mail** settings, open the settings window as described in Managing SpIDer Mail.

When editing the settings, use the program's help system (general help for each page is generated by clicking **Help**; there is also a context prompt for certain elements of the interface).

When you finish adjusting the settings, click **OK**.

Scanning Page

Most default settings are optimal for the majority of situations. The most frequently used parameters, except the default ones are described below.

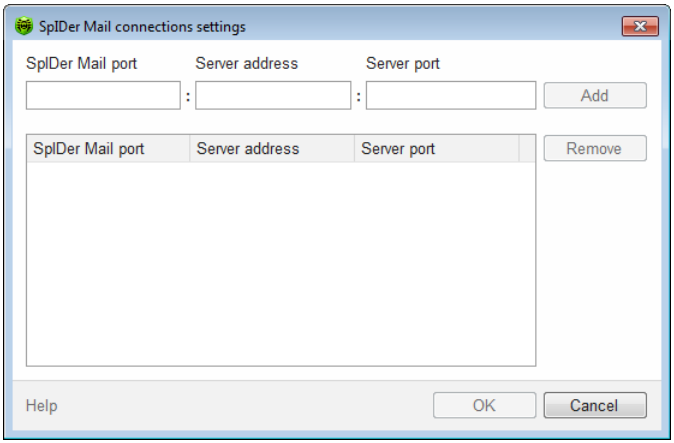


Using SpIDer Mail as a proxy server

SpIDer Mail can intercept connections with the following mail servers:

- POP3 servers;
- SMTP servers;
- IMAP4 servers;
- NNTP servers.

To configure connection interception settings and enable use of **SpIDer Mail** as a proxy serve, click **Change**.



To remove an element from the list, select it and click **Remove**.

To add a server or a group of servers to the list, specify its address (IP address or domain name) in the **Server address** field and the called port number into the **Server port** field and click **Add**.

The `localhost` address is not intercepted if the asterisk (*) is specified. If necessary, this address should be specified in the interception list explicitly.

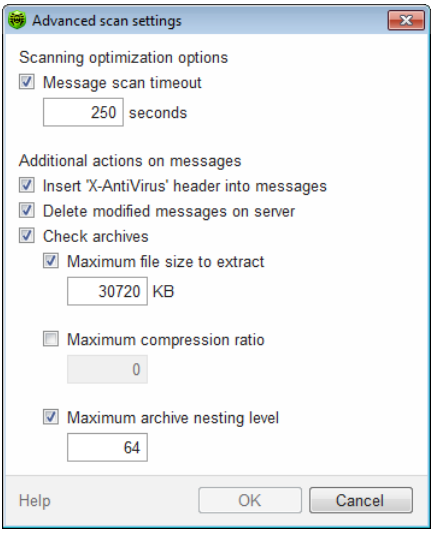
To set up mail interception

1. Make up a list of resources (POP3/SMTP/IMAP4/NNTP servers) connections to which should be intercepted. Number them one after another starting from `7000`. Hereinafter these numbers will be called **SpIDer Mail ports**.
2. In the **SpIDer Mail** settings window, select the **Scanning** page and click **Change** under the list of ports.
3. For every resource input the **SpIDer Mail port** that you assigned for the mail server into the **SpIDer Mail port** entry field, a domain name or IP address of the server into the **Server address** entry field and the port number to which a connection is made into the **Server port** entry field and click **Add**.
4. Repeat these actions for each resource.
5. Click **OK**.

In the settings of the mail client, instead of the address and port of POP3/SMTP/IMAP4/NNTP server, specify the address `localhost`: *<port_SpIDer_Mail>*, where *<port_SpIDer_Mail>* is the address assigned to an appropriate POP3/SMTP/IMAP4/NNTP server.

Additional settings

To get access to advanced settings, click **Advanced**.



To enable one or more options, select the corresponding checkboxes:

Option	Description
Message scan timeout	The maximum message scanning time. If exceeded, **SpIDer Mail** stops the scan and acknowledges message as unchecked.
Maximum file size to extract	The maximum file size at unpacking. If the size of extracted files will exceed the limit, **SpIDer Mail** neither unpacks, nor scans the archive.
Maximum compression ratio	The maximum archives compression rate. If the compression rate of the archive exceed the limit, **SpIDer Mail** neither unpacks, nor scans the archive.
Maximum archive nexting level	The maximum nesting level for archived files. During scan, **SpIDer Mail** proceeds unpacking and scanning the archive until this limit is exceeded.

Actions Page

On this page, you can configure reactions of **SpIDer Mail** to various virus events.

To configure default actions

1. In the **Infected messages** drop-down list choose the program's action upon detection of an infected message (**Cure** action is recommended).
2. In the **Incurable messages** drop-down list choose the program's action upon detection of an incurable message (**Move to quarantine** action is recommended). Other actions with moved files are described in Neutralizing Detected Threats.
3. In the **Suspicious messages** drop-down list choose the program's action upon detection of a suspicious message. (**Move to quarantine** action is recommended).
4. In the **Non checked messages** and **Malformed messages** drop-down lists choose the program's action upon detection of a non-checked or malformed message. (**Ignore** action is recommended).
5. In the **Adware** and **Dialers** drop-down lists choose the program's action upon detection of adware and dilers. (**Move to quarantine** action is recommended).
6. The same procedure is used when setting the program's actions upon detection of messages containing jokes, riskware and hacktools. (**Ignore** action is recommended).
7. Click **OK** to apply changes and close the **SpIDer Mail Settings** window.

Protection against suspicious messages can be disabled if a PC is additionally protected by a constantly loaded **SpIDer Guard** component.

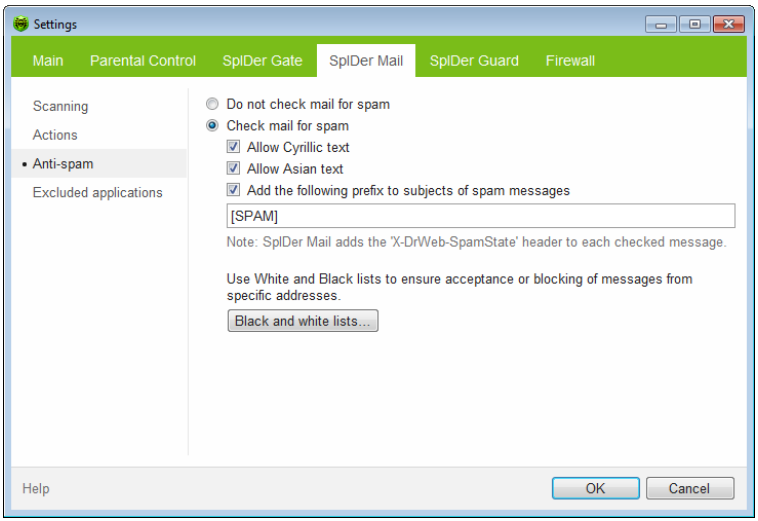
Additionally, you can increase the default level of reliability of anti-virus protection by selecting the **Move to quarantine** option in the **Not checked messages** drop-down list. Files with moved messages should be checked by the scanner.

You can enable the mode when the deleted or moved messages are immediately deleted from the POP3/IMAP4 server. For this, set the **Delete modified messages on server** check box in advanced settings.

Anti-spam Page

Settings of the spam filter can be set on the **Anti-spam** page.

By default **SpIDer Mail** scans incoming messages for spam. To disable the spam filter, select the **Do not check mail for the spam** mode.



The following headers will be added to all scanned messages:

- `X-DrWeb-SpamState: Yes/No`. "Yes" shows that the message is spam. "No" means that **SpIDer Mail** does not regard the message as spam.
- `X-DrWeb-SpamVersion: version`. "version" is the version of **Anti-spam** library.
- `X-DrWeb-SpamReason: spam rate`. Spam rate includes list of evaluations on various spam criteria.

If you use IMAP or NNTP, configure your e-mail client to download complete messages from the e-mail server at once – without previewing their headers. This is important for correct operation of the spam filter.

Selecting the **Add a prefix to the subjects of spam messages** check box instructs **SpIDer Mail** to add a special prefix to subjects of spam messages. This prefix can be specified in the field below. Use of the prefix will allow you to create filter rules for spam in e-mail clients which do not support filtering by headers (e.g. MS Outlook Express).

Selecting the **Allow Cyrillic text** check box instructs the spam filter to analyze messages with Cyrillic encoding. If the check box is not selected, it is highly possible that messages with Cyrillic encoding will be regarded as spam.

Functioning of the **Allow Asian text** check box is the same as the one described above but for East Asian encodings.

In the **White list** and **Black list** fields, white and black lists of senders' addresses are specified.

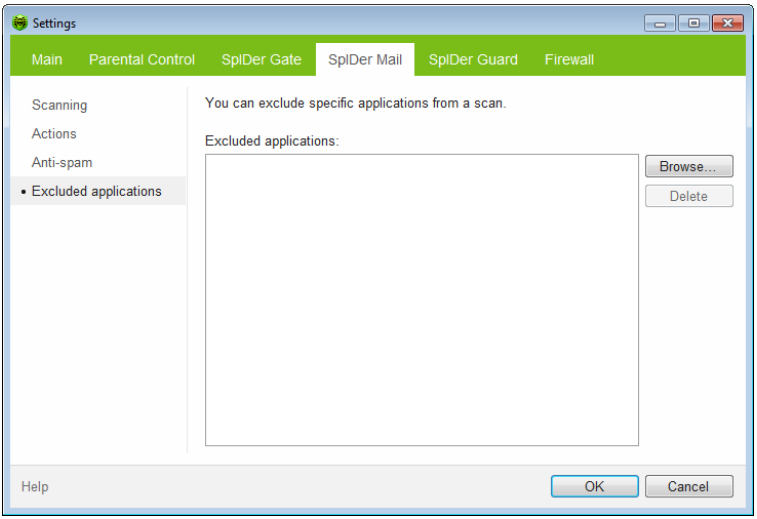
- If a sender's address is on the white list, the message is not scanned for spam.
- If a sender's address is on the black list, the message will be automatically regarded as spam.

The asterisk `*` symbol can stand for a part of address (e.g. `*@domain.org` denotes all addresses with the "domain.org" domain name). Addresses must be divided by a semicolon ";".

If the spam filter regards certain messages as spam by mistake, you are advised to forward such messages to special e-mail addresses for analysis. Messages which are wrongly regarded as spam should be forwarded to vrnonspam@drweb.com, and unblocked spam messages should be forwarded to vrspam@drweb.com. Forward messages as attachments; do not include them to the message body.

Excluded Applications Page

By default, **SpIDer Mail** intercepts e-mail traffic of all applications running on your computer automatically. On this page, you can list applications whose mail traffic you want to exclude from monitoring with **SpIDer Mail**.



To add a file, folder or mask to the list, type its name into the entry field and click **Add**. To enter an existing file name or folder, you can click **Add** to the right and select the object in a standard file browsing window.

To remove a file or folder from the list select it in the list and click **Remove**.

7. Dr.Web for Outlook

Dr.Web for Outlook plug-in performs the following functions:

- Anti-virus check of e-mail attachments transferred via SMTP, POP3 and HTTP protocols.
- Check of e-mail attachments transferred via SSL encrypted connections.
- Spam check.
- Detection and neutralizing of malicious objects.
- Malware detection.
- Heuristic analysis for additional protection against unknown viruses.

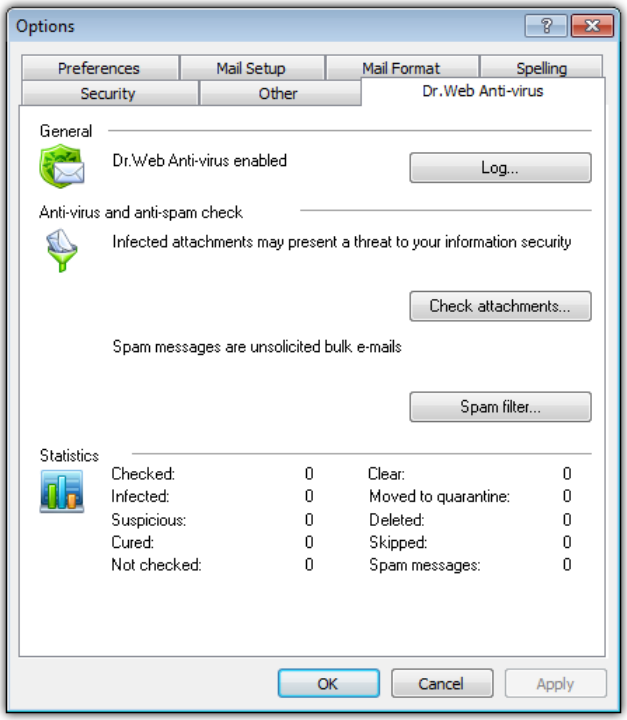
7.1. Configuring Dr.Web for Outlook

You can configure **Dr.Web for Outlook** plug-in operation and review statistics at the Microsoft Outlook mail application, in the **Tools** → **Options** → **Dr.Web Anti-virus** tab (in the **Files** → **Options** select **Dr.Web for Outlook** and click **Add-in Options** button for Microsoft Outlook 2010).

The **Dr.Web Anti-virus** tab of Microsoft Outlook parameters are active only if user has permissions to change these settings.

On **Dr.Web Anti-virus** tab, the current protection status is displayed (enabled/disabled). The tab provides access to the following program functions:

- Log – allows to configure the program logging.
- Check attachments – allows to configure the e-mails check and to specify the program actions for the detected malicious objects.
- Spam filter – allows to specify the program actions for spam and to create black and white lists of e-mail addresses.
- Statistics – allows to review the number of checked and processed objects.



7.2. Threat Detection

Dr.Web for Outlook uses different detection methods. The infected objects are processed according to the actions defined by user: the program can cure the infected objects, remove them or move these objects to Quarantine to isolate them from the rest of the system.

7.2.1. Types of Threats

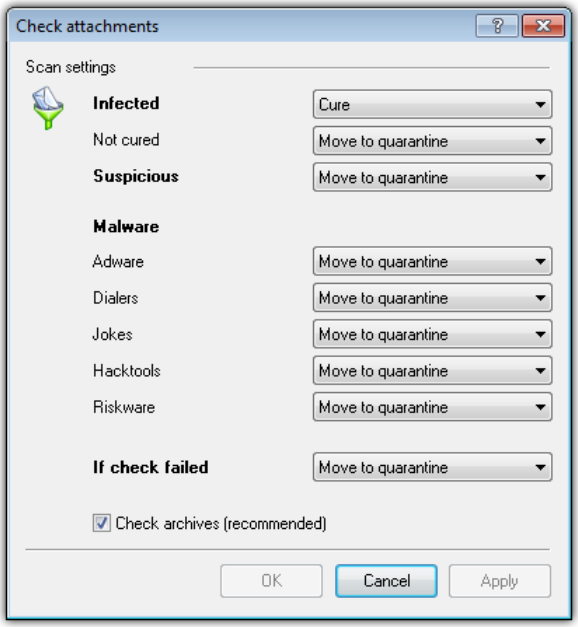
Dr.Web for Outlook detects the following computer security threats in the mail:

- Infected objects
- Bomb viruses in files or archives
- Adware
- Hacktools
- Dialer programs
- Joke programs
- Riskware
- Spyware
- Trojan horses (Trojans)
- Computer worms and viruses

7.2.2. Configuring Actions

Dr.Web for Outlook allows to specify reaction to detection of infected or suspicious files and malicious objects during e-mail attachments check.

To configure the virus check of e-mail attachments and to specify the program actions for the detected malicious objects, in the Microsoft Outlook mail application, in the **Tools** → **Options** → **Dr.Web Anti-virus** tab (in the **Files** → **Options** select **Dr.Web for Outlook** and click **Add-in Options** button for Microsoft Outlook 2010), click **Check attachments**.



In the **Check attachments** window, specify the actions for different types of checked objects and also for the check failure. You can also enable/disable checking the archives.

To set actions on virus threats detection, use the following options:

- The **Infected** drop-down list sets the reaction to the detection of a file infected with a known virus.
- The **Not cured** drop-down list sets the reaction to the detection of a file infected with a known incurable virus (and in case an attempt to cure a file failed).
- The **Suspicious** drop-down list sets the reaction to the detection of a file presumably infected with a virus (upon a reaction of the heuristic analyzer).
- In the **Malware** section, set the reaction to the detection of types of unsolicited software such as:
  - Dialers
  - Jokes
  - Riskware
  - Hakctools
- The **If checked failed** drop-down list allows to configure actions, if attachment can not be checked, e.g. if attached file is corrupted or password protected.
- The **Check archives (recommended)** check box allows to enable or disable checking of attached archived files. Select this check box, to enable checking, clear – to disable.

For different types of objects, actions are assigned separately.

The following actions for detected virus threats are provided:

- **Cure** (only for infected objects) – instructs to try to restore the original state of an object before infection.
- **As incurable** (only for infected objects) – means, that the action specified for incurable objects will be performed.
- **Delete** – delete the object.
- **Move to quarantine** – move the object to the special Quarantine folder.
- **Skip** – skip the object without performing any action or displaying a notification.

7.3. Spam Check

The **Spam Filter** section is available for **Dr.Web Security Space** only.

If your license does not support the **Spam filter**, its settings are not available and the e-mails check for spam is not performed.

Dr.Web for Outlook checks e-mails for spam by means of **Dr.Web Anti-spam** and filters the messages according to the user defined settings.

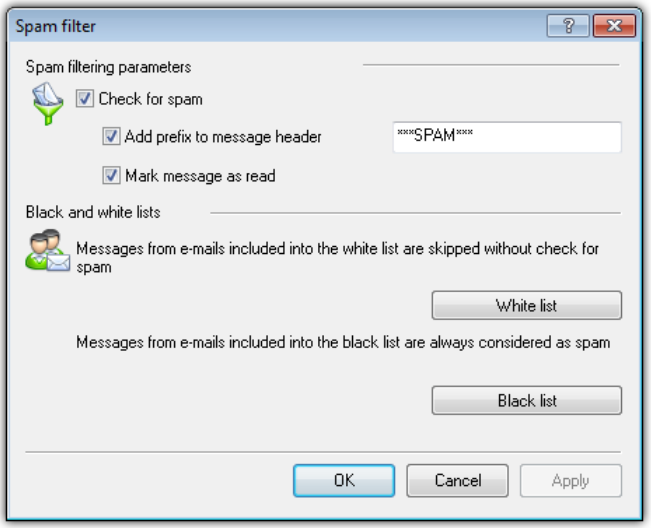
To configure the check for spam, in the Microsoft Outlook mail application, in the **Tools** → **Options** → **Dr.Web Anti-virus** tab (in the **Files** → **Options** select **Dr.Web for Outlook** and click **Add-in Options** button for Microsoft Outlook 2010), click **Spam filter**. The window with spam filter settings will be opened.

The **Spam-filter** window will be available only for users with administrative rights.

For Windows Vista and later operating systems, after clicking **Spam-filter**:

- if UAC is enabled: administrator is requested to confirm program actions, user without administrative rights is requested to enter accounting data of system administrator
- if UAC is disabled: administrator can change program settings, user does not have the access to change program settings

7.3.1. Configuring Spam Filter


Spam filter
Spam filtering parameters
Check for spam
Add prefix to message header
SPAM
Mark message as read
Black and white lists
Messages from e-mails included into the white list are skipped without check for spam
White list
Messages from e-mails included into the black list are always considered as spam
Black list
OK
Cancel
Apply

To configure spam filter

1. To run spam checks, select the **Check for spam** checkbox.
2. You can add special text to the spam message header by setting the **Add prefix to message header** check box. The added prefix text is specified to the right of the check box. The default prefix is `***SPAM***`.
3. The checked messages can be marked as read in the message options. To mark messages as read on spam check, select the **Mark message as read** check box. This option is enabled by default.
4. You can also configure black and white lists.

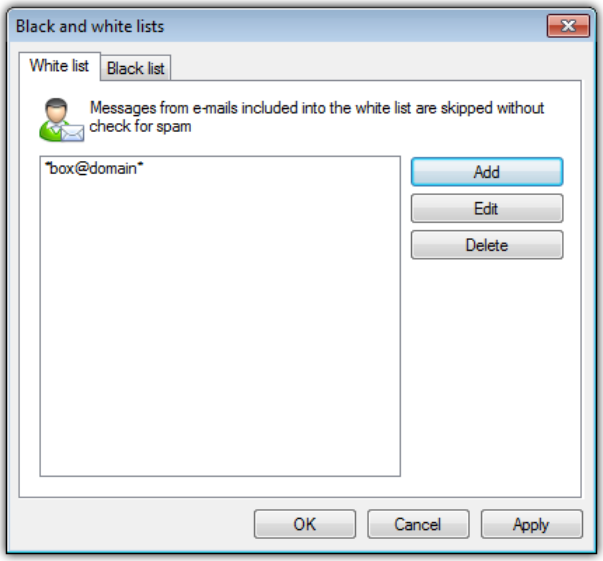
If spam filter defines certain messages incorrectly, you are advised to forward such messages to special e-mail addresses for analysis.

- Messages which are wrongly regarded as spam should be forwarded to vrnonspam@drweb.com
- Unblocked spam messages should be forwarded to vrspam@drweb.com

Forward messages as attachments; do not include them to the message body.

7.3.2. Using Black and White Lists

Black and white lists are used for messages filtration. To review and edit the black and white lists, click **Black list** or **White list** respectively on the **Spam filter** window.



To add addresses

1. Click **Add**.
2. In the **Edit list** window, enter the address (see white and black lists filling methods).
3. Click **OK**.

To change addresses

1. Select the address you want to change and click **Edit**.
2. Change the address.
3. Click **OK**.

To delete addresses

1. Select the address in the list.
2. Click **Delete**.

In the **Black and White lists** window, click **OK** to save changes.

White List

If the sender's address is on the white list, the message is not scanned for spam. But, if domain name of receiver and sender addresses are matched, and this domain name is specified in the white list using the `*` symbol, this letter will be checked for spam.

- To add a definite sender, enter the full email address (for example, `friend@mail.com`). This ensures delivery of all messages from this sender.
- Addresses must be divided by the ";" symbol.
- To add a group of sender addresses, enter the mask that determines their names. The mask defines template for an object definition. It may contain regular characters from the e-mail addresses and special `*` character, replaces any (including the empty one) sequence of any symbols.

For example, the following addresses are available:

- `mailbox@domain.com`
- `*box@domain.com`
- `mailbox@dom*`
- `*box@dom*`

The `*` symbol can be set at the start or at the end of an address only.

The `@` symbol is obligatory.

- To ensure delivery of messages sent from any email address within a domain, use the `*` character instead of the username in the address. For example, if you enter `*@example.net`, **SpIDer Mail** will deliver without scanning the messages from all senders within the "example.net" domain.
- To ensure delivery of messages sent from email address with a certain user name from any domain, use the `*` character instead of the domain name in the address. For example, if you enter `ivanov@*`, **SpIDer Mail** will deliver without scanning the messages from all senders with the "ivanov" mailbox name.

Black List

If the sender's address is on the black list, the message will be automatically regarded as spam.

- To add a definite sender, enter the full email address (for example, `spam@domain.com`). All messages, received from these addresses, will be automatically regarded as spam.
- Addresses must be divided by the "*;* " symbol.
- To add a group of sender addresses, enter the mask that determines their names. The mask defines template for an object definition. It may contain regular characters from the e-mail addresses and special `*` character, replaces any (including the empty one) sequence of any symbols.

For example, the following addresses are available:

- `mailbox@domain.com`
- `*box@domain.com`
- `mailbox@dom*`
- `*box@dom*`

The `*` symbol can be set at the start or at the end of an address only.

The `@` symbol is obligatory.

- To regard as spam messages sent from any email address within a domain, use the `*` character instead of the username in the address. For example, if you enter `*@spam.com`, **SpIDer Mail** will regard as spam messages from all senders within the "spam.com" domain.
- To regard as spam messages sent from email address with a certain user name from any domain, use the `*` character instead of the domain name in the address. For example, if you enter `ivanov@*`, **SpIDer Mail** will regard as spam messages from all senders with the "ivanov" mailbox name.
- Addresses from the recipient domain are not processed. For example, if the recipient mailbox (your mailbox) is in the "mail.com" domain, then messages from "mail.com" domain will not be processed with the anti-spam filter.

7.4. Logging

Dr.Web for Outlook registers errors and application events in the following logs:

- Windows Event Log
- Text Dr.Web debug log

7.4.1. Event Log

Dr.Web for Outlook registers the following information in the Windows Event Log:

- Plug-in starts and stops.
- License key file parameters: license validation, license expiration date (information is written during program launch, during program operating and when key file is changed).
- License errors: the key file is absent, permission for usage of program modules is absent in the key file, licence is blocked, the key file is corrupted (information is written during program launch and during program operating).
- Parameters of program modules: Scanner, engine, virus bases (information is written during program launch and modules update).
- Information on threats detection.
- License expiration notifications (a message is registered in 30, 15, 7, 3, 2 and 1 days before expiration).

To view Event Log

1. On the **Control Panel**, select **Administrative Tools** → **Event Viewer**.
2. In the tree view, select **Application**. The list of events, registered in the log by user applications, will be opened. The source of **Dr.Web for Outlook** messages is the **Dr.Web for Outlook** application.

7.4.2. Debug Text Log

The following information can be registered in the **Dr.Web for Outlook** text log:

- License validity status
- Malware detection reports per each detected malicious object
- Read-write errors or errors while scanning for archives or password-protected files
- parameters of program modules: **Scanner**, engine, **Dr.Web virus databases**
- Core failures
- License expiration notifications (a message is registered in 30, 15, 7, 3, 2 and 1 days before expiration)

Enabling the program logging in the Log file decreases server performance, therefore it is recommended to enable logging only in case of errors occurrence in operation of **Dr.Web for Outlook**.

To configure logging

1. On **Dr.Web Anti-virus** tab, click **Log**. The window of log settings will open.
2. Specify the detailing level (0 – 5) for logging:
   - level 0 corresponds to disable logging
   - level 5 means the maximum level of details for the program logging

   By default, logging is disabled.
3. Specify the maximum log file size (in kilobytes).
4. Click **OK** to save changes.

The **Log** window will be available only for users with administrative rights.

For Windows Vista and later operating systems, after clicking **Log**:

- if UAC is enabled: administrator is requested to confirm program actions, user without administrative rights is requested to enter accounting data of system administrator
- if UAC is disabled: administrator can change program settings, user does not have the access to change program settings.

To view program log

To open the text log, click **Show in folder**.

7.5. Statistics

In the Microsoft Outlook mail application, in the **Tools** → **Options** → **Dr.Web Anti-virus** tab (in the **Files** → **Options** select **Dr.Web for Outlook** and click **Add-in Options** button for Microsoft Outlook 2010), statistic information about total number of objects which have been checked and treated by the program is listed.

These scanned objects are classified as follows:

- **Checked** – total number of checked messages.
- **Infected** – number of messages with viruses.
- **Suspicious** – number of messages presumably infected with a virus (upon a reaction of the heuristic analyzer).
- **Cured** – number of objects successfully cured by the program.
- **Not checked** – number of objects, which can not be checked or error has occurred during scan.
- **Clear** – number of messages, which are not infected.

Then the number of the following categories of treated objects is specified:

- **Moved to quarantine** – number of objects, which have been moved to Quarantine.
- **Deleted** – number of objects, deleted from the system.
- **Skipped** – number of objects, skipped without changes.
- **Spam messages** – number of objects, detected as spam.

By default, statistics file is drwebforoutlook.stat file that is located in the %USERPROFILE%\DoctorWeb folder (for Windows 7, C:\Users\<*username*>\DoctorWeb). To clear statistics, delete this file.

drwebforoutlook.stat statistics file is individual for each system user.

8. SpIDer Gate

SpIDer Gate is an anti-virus HTTP-monitor. By default, **SpIDer Gate** automatically checks incoming HTTP-traffic and blocks all malware objects. HTTP is used by web browsers, download managers and other applications which exchange data with web servers, i.e. which work with the Internet.

You can configure **SpIDer Gate** to completely disable monitoring of incoming or outgoing traffic, compose a list of applications whose HTTP-traffic should always be checked or exclude certain applications from being monitored.

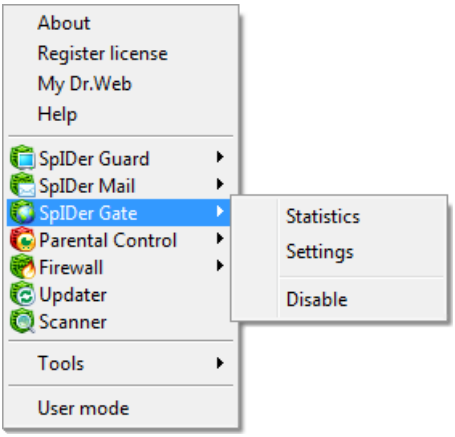
By default, **SpIDer Gate** blocks all incoming malware objects. URL filtering of malicious and unreliable Web sites is also enabled by default.

You can also connect to **Doctor Web** cloud services and check websites for virus threats in real time.

SpIDer Gate resides in the main memory of the computer and automatically launches upon Windows startup.

8.1. Managing SpIDer Gate

SpIDer Gate can be managed via the **SpIDer Gate** item in the context menu of the **SpIDer Agent** icon (see SpIDer Agent).



The **Settings** item provides access to the major part of adjustable parameters of the program.

The **Statistics** item opens a window containing information about the **SpIDer Gate** performance within the current session.

The **Disable**/**Enable** item allows to start/stop **SpIDer Gate**.

Settings and **Disable**/**Enable** items are not available in User mode.

You can restore settings to their default values on the **Restore defaults** page of **Dr.Web Security Space** Main settings.

8.2. SpIDer Gate Settings

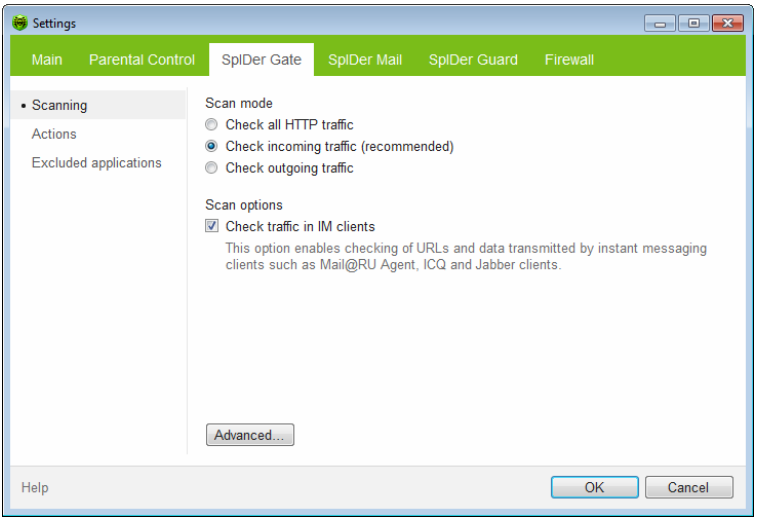
The default settings are optimal for most cases. They should not be changed without necessity.

To change the SpIDer Gate Settings

1. Make necessary changes on the pages of the **SpIDer Gate Settings** window.
2. For more information about settings on a page, click the **Help**.
3. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

Scanning Page

On this page, you can select a mode to scan traffic and transmitted data.



In the **Scan mode** group, you can choose type of the checked HTTP-traffic.

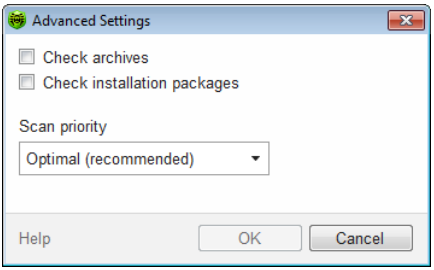
IM Clients Check

In the **Scan options** group, you can enable check of URLs and data transmitted by instant messaging clients (Mail@RU Agent, ICQ and clients using the Jabber protocol). Only incoming traffic is checked. By default, this option is enabled.

Links transmitted in messages are checked according to the **SpIDer Gate** settings: links to the websites known as infection sources are blocked automatically; links to the websites that are not recommended for visiting or URLs with content that infringes copyright are blocked only if the corresponding options are enabled on the Actions page. At that, white list and list of excluded applications also have an effect.

Files transmitted by instant messaging clients are also checked. When a threat is detected, the file transmission is blocked if the corresponding setting is enabled on the Actions page. Viruses are blocked automatically if the **Check traffic in IM clients** option is enabled.

To get access to advanced settings, click **Advanced** in **Scanning** tab.

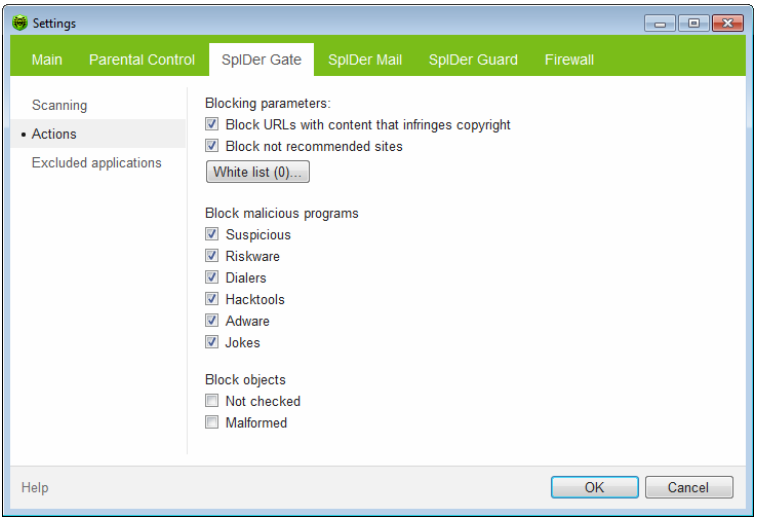


In this window, you can configure additional settings of HTTP traffic scans.

You can adjust **Scan priority** that determines distribution of resources depending on traffic scanning priority. Internet connection speed decreases when **SpIDer Gate** operates with lower priority, since the monitor have to wait longer for downloading and scans larger portions of data. When you increase the priority, **SpIDer Gate** starts scanning data more often, thus increasing speed of your Internet connection. However, frequent scans also increase processor load.

Actions Page

On this page, you can configure additional settings of HTTP traffic scans and specify actions on detection of a threat.



In the **Blocking parameters** group, you can enable automatic block of URLs with content that infringes copyright (for that, select the corresponding checkbox) and block of unreliable websites (select **Block not recommended sites**).

To specify sites that should be allowed for access regardless to other restrictions, click **White list.**

You can also configure blocking of malicious programs and objects. By default, all malicious programs are blocked.

Excluded Applications Page

By default, **SpIDer Gate** checks incoming and outgoing HTTP traffic on any port. On the **Excluded Applications** page, you can set up which applications to include or exclude from monitoring.

Add applications, whose network activity should not be checked at all, to the **Excluded applications** list. You should only add applications which you trust to this list.

To add an application to a list, click **Browse** and select the application in a standard window. To delete an application from a list, select it and click **Delete**.

9. Parental Control

The **Parental Control** component allows you to restrict access to devices on your computer and both local and web resources. You can also set time limits on using the Internet and computer for certain Windows accounts.

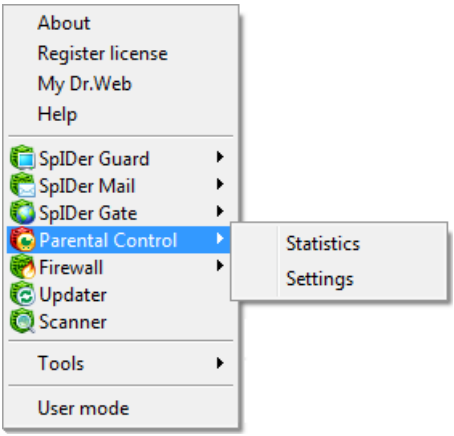
By restricting access to the local file system you can maintain the integrity of important files, protect them from viruses and secure the confidentiality of stored data. It is possible to restrict access to separate files or folders on local drives and external data carriers. You can also completely restrict copying data to any kinds of external data carriers.

By controlling access to web resources you can restrict a user to view undesirable web sites (e.g. pages on violence, gambling, adult content, etc.) or allow access only to certain web sites, specified in the **Parental Control** settings.

You can also connect to **Doctor Web** cloud services and check contents of websites in real time.

9.1. Managing Parental Control

Parental Control can be managed via the **Parental Control** item in the context menu of the **SpIDer Agent** icon (see SpIDer Agent).



The **Settings** menu item gives access to the main part of the program parameters (for details, see Parental Control Settings).

If the **Statistics** menu item is selected, a window with information on the program's operation during current session (the number of blocked resources of different types, last allowed or restricted URLs) will open.

Settings item is not available in User mode.

You can restore settings to their default values on the **Restore defaults** page of **Dr.Web Security Space** Main settings.

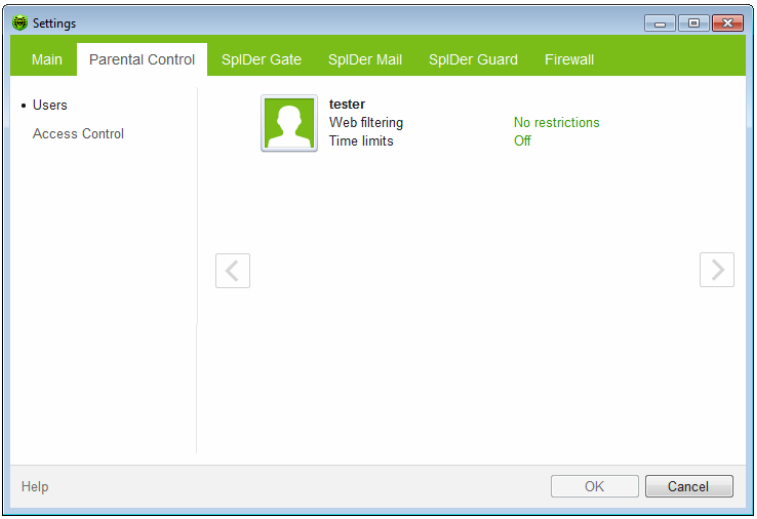
9.2. Parental Control Settings

To change the settings of the Parental Control component

1. Make necessary changes on the pages of the **Parental Control Settings** window.
2. For more information about settings on a page, click the **Help**.
3. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

Users Page

On this page, you can set restrictions on Web access as well as the time spent in the Internet on working on the computer. For different Windows accounts, restrictions are assigned separately and display next to the corresponding account. Accounts are automatically displayed in the settings window.



By default, all users have unlimited access to Web resources and no time limits.

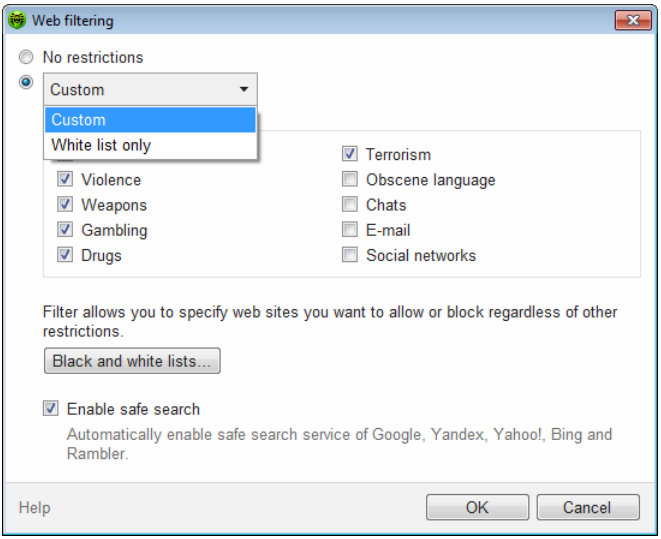
Use the arrows to navigate through the user list.

Web Filter

By default, the **No restrictions** mode is set for all users. You can configure access to Web resources and populate White and Black lists separately for each user.

To restrict access to websites

1. On the **Users** page in **Parental Control** settings, find the required account.
2. Click the corresponding link in the **Web filtering** section. The settings window opens.



3. Select a mode of access to websites.

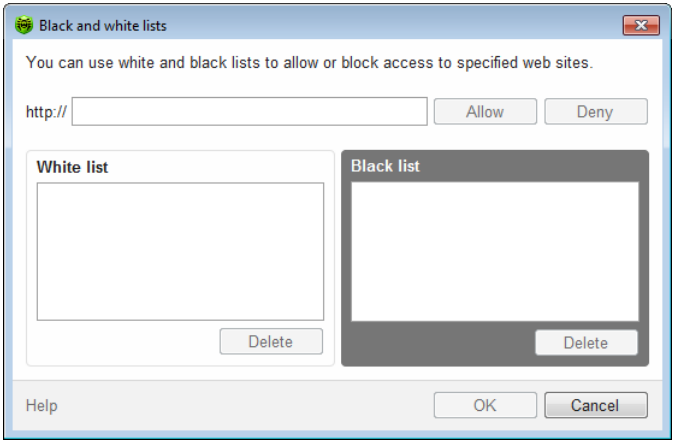
Mode	Description
No restrictions	In this mode you grant unlimited access to Internet resources to all users of your computer.
Custom	In this mode you can select websites to block either by category, or according to manually populated black and while lists. To configure the lists, click **Black and white lists.**
White list only	In this mode you grant access to the websites in the white list only. Access to any other website is blocked. To list trusted websites, click **Black and white lists.**
Enable safe search	This option enables safe search for Google, Yandex, Yahoo!, Bing and Rambler search engines, which allows to exclude of unwanted webpages from search results.

Lists of categorized websites are updated with the **Dr.Web virus databases** on regular basis.

4. After editing, click **OK** to save the changes or **Cancel** to cancel them.

To create Black and while lists

1. Enter a domain name (or part of it) into the field.
   - If you wish to add a specific web site, enter its full address (e.g. `www.example.com`). Access to all resources on that web site will be allowed/restricted.
   - If you wish to allow/restrict access to web sites, which contain certain text in their address name, enter that text into the field (e.g. `example` means that access to **example**.com, **example**.test.com, test.com/**example**, test.**example**222.ru, etc. will be allowed/restricted).



- If the string contains the "." symbol, it will be considered a domain name. In this case all resources on the domain will be filtered. If the string also contains the "/" symbol (e.g. `example.com/test`), then the part to the left of it will be considered the domain name and the part to the right will be allowed/restricted on the domain (for example, **example.com/test**11, template.**example.com**/**test**22, etc. will be filtered).

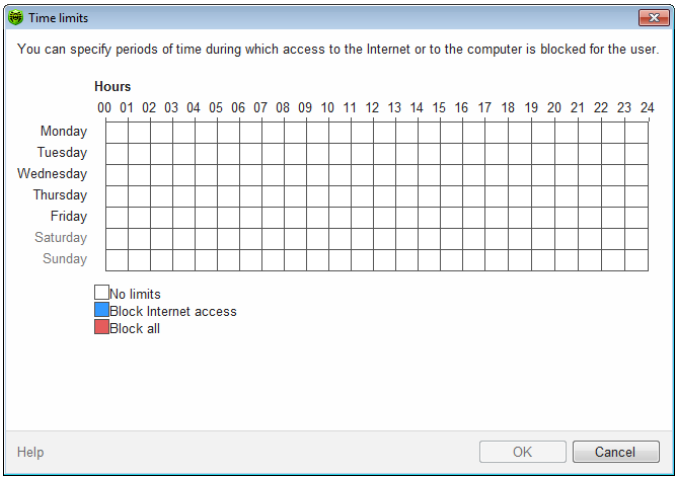
2. Do one of the following:
   - To allow access to the website, click **Allow.**
   - To deny access to the website, click **Deny.**
3. To delete a web resource from the list, select it and click the corresponding **Delete** button.

Time Limits

By default, all users have unlimited access to use the computer and the Internet. You can change the mode separately for each user.

To set time limits

1. On the **User** page in **Parental Control** settings, find the account of the required user.
2. Click the corresponding link in the **Time limits** section. The settings window opens.



3. Select days of week and time when the user is restricted from using the Internet, and then mark the corresponding timeslots blue. Methods:
   - To mark one timeslot, click on it once;
   - To mark several adjacent timeslots, click once on the first one and select the rest of required squares while holding the mouse button.
4. Select days of week and time when the user is restricted from using the computer, and then mark the corresponding timeslots red.
5. After editing, click **OK** to save the changes or **Cancel** to cancel them.

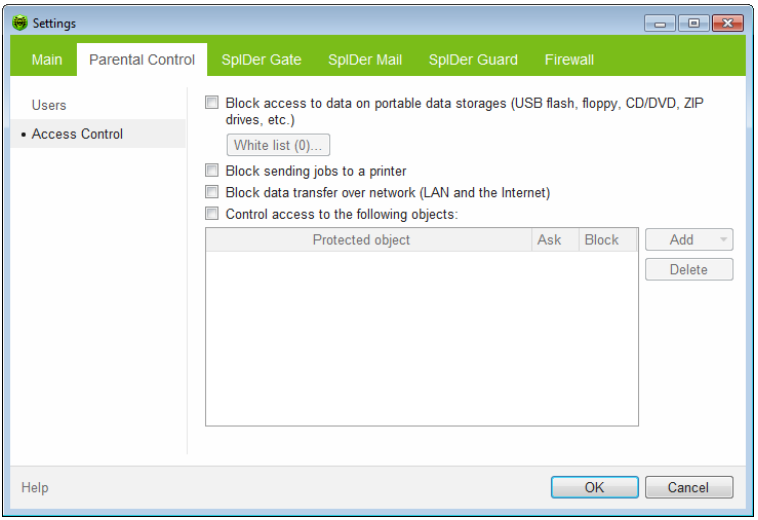
Access Control Page

On this page, you can block access data to portable data storages, limit access to specific devices, folders, or files on your computer. Also you can block data transfer over the network.

Access control rules are effective for all Windows accounts.

Access to portable data storages

To block access to data on portable data storages (USB flash, floppy, CD/DVD, ZIP drives, etc.), set the corresponding checkbox. If you want to have access to data on specific USB data storage devices regardless this setting, you can list devices access to which will be always allowed. To do this, click **White list** (this button is enabled only if the checkbox is set). You can use the created White List on other computers if **Dr.Web** anti-virus protection version 9.0 is installed on them.



Sending jobs to a printer

To prevent sending jobs to a printer, select the **Block sending jobs to a printer** checkbox. By default, this checkbox is not set.

To configure list of restricted objects

1. Select the **Restrict access to the selected objects** checkbox.
2. Click **Add** and select the type of object. You can limit access to a file or folder as well as a particular device or a whole class of devices.

Access restrictions for a class of devices has a higher priority than restrictions for a particular device. For instance, if you block access to all removable media, then an existing rule for a certain flash drive will become ineffective.

3. Add the object to the list and do one of the following to set the restriction method:
   - Select **Ask** to display a prompt when **Parental Control** detects an attempt to access the object. In the prompt, you will be able to select a reaction.
   - Select **Block** to forbid access to the object automatically.
4. To add other objects and folders to the list, repeat steps 2 to 3. To remove an object from the list, select the corresponding item in the list and click **Delete**. Users will be able to access the object again.

10. Dr.Web Firewall

Dr.Web® Firewall protects your computer from unauthorized access and prevents leak of vital data through networks. **Dr.Web Firewall** monitors connection attempts and data transfer and helps you block unwanted or suspicious connections both on network and application levels.

Main Features

Dr.Web Firewall provides you with the following features:

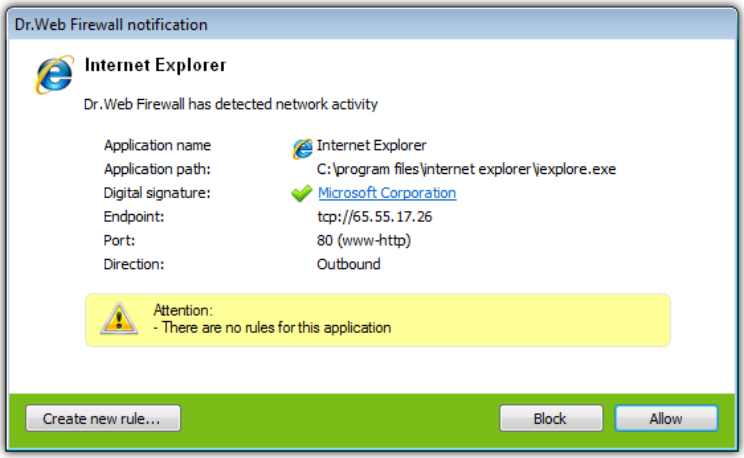
- Control and filtration of all incoming and outgoing traffic
- Access control on application level
- Network level packet filtering
- Fast selection of rule sets
- Event logging

10.1. Training Dr.Web Firewall

By default, once installation completes, **Dr.Web Firewall** starts learning usual behaviour of your operating system by intercepting all new (unknown to the firewall) connection attempts and prompting you to select the necessary action.

You can either select a temporary solution, or create a rule which will be applied each time **Dr.Web Firewall** detects this type of connection.

When running under limited user account (Guest) **Firewall** does not prompt requests for network access attempts. Notifications are then forwarded to the session with administrator privileges, if such session is simultaneously active.

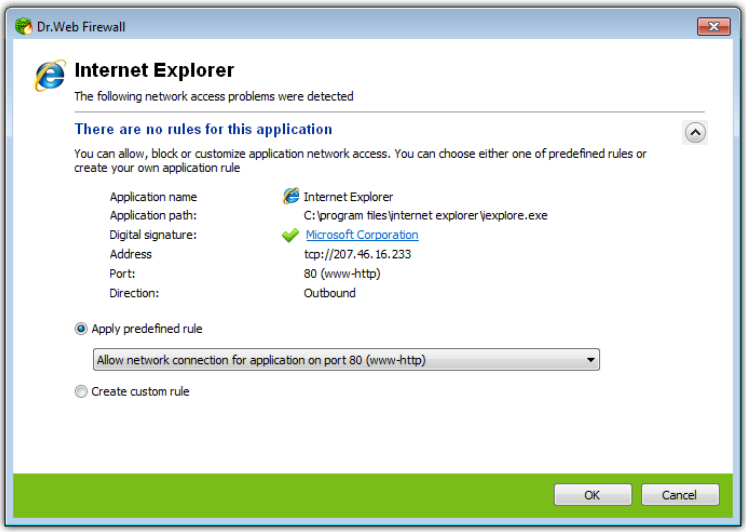


To process connection attempts

1. To make a decision, consider the following information displayed in the notification:

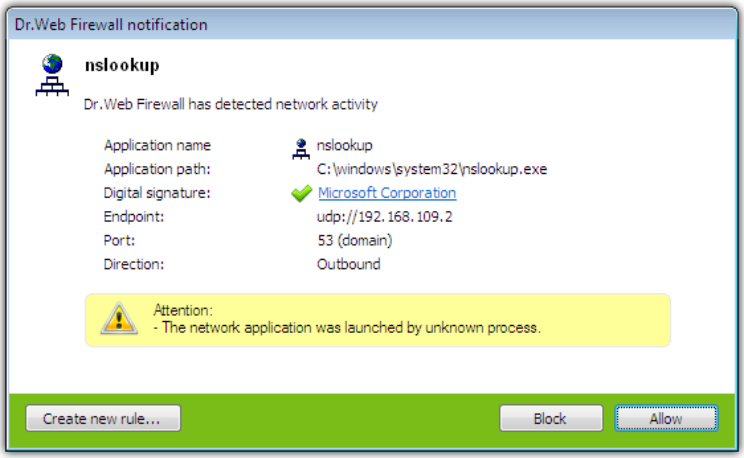
Information	Description
Application name	The name of the application. Ensure that the **Path** to the application executable file corresponds to its usual location.
Application path	The full path to the application executable file and its name.
Digital signature	Digital signature of the application.
Endpoint	The protocol used and the network address the application is trying to connect to.
Port	The network ports used for the connection attempt.
Direction	Connection type.

2. Once you make a decision, select an appropriate action:
   - To block this connection once, select **Block**
   - To allow this connection once, select **Allow**
   - To open a window where you can create a new application filter rule, select **Create new rule**. In the opened window you can either choose one of the predefined rules or create your rule for application.



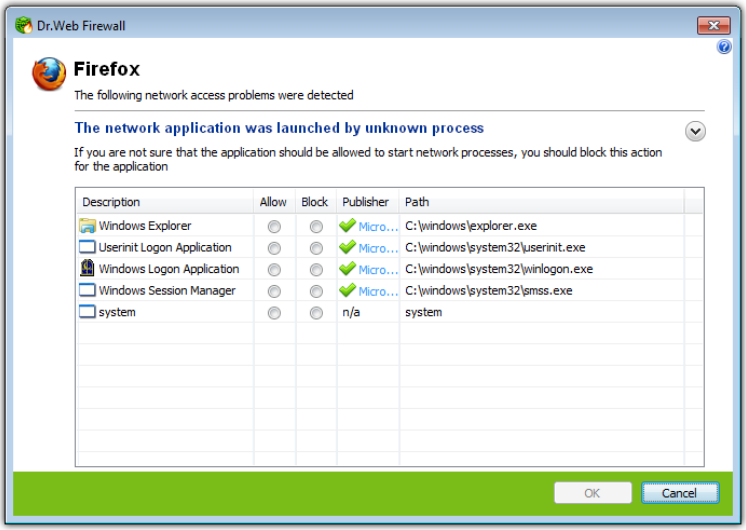
3. Click **OK**. **Dr.Web Firewall** executes the selected action and closes the notification window.

In cases when connection was initiated by a trusted application (an application with existing rules), but this application was run by an unknown parent process, a corresponding notification will be prompted:



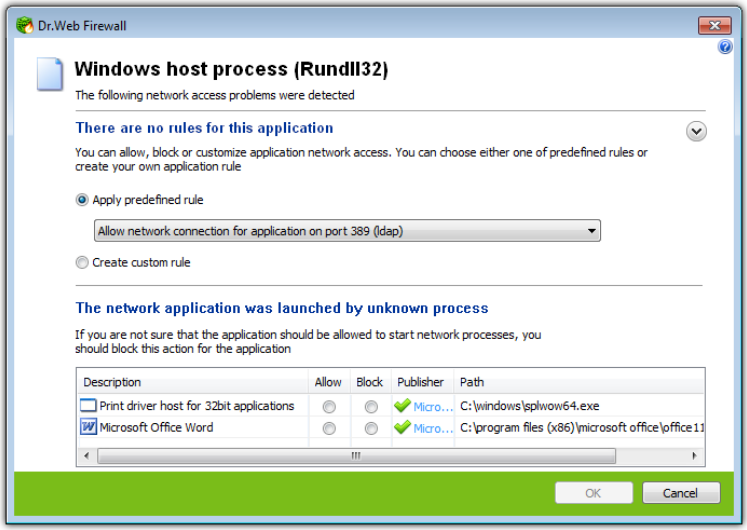
To set parent processes rules

1. Consider the information about parent process displayed in the notification.
   - To block this connection once, select **Block**
   - To allow this connection once, select **Allow**
   - To open a window where you can create a new application filter rule, select **Create new rule**. In the opened window you can either choose one of the predefined rules or create your rule for parent process.



2. Click **OK**. **Dr.Web Firewall** executes the selected action and closes the notification window.

When unknown process was run by another unknown process, a notification will display corresponding details. If you click **Create new rule**, the new window will appear, allowing you to create new rules for this application and it's parent process:


Dr.Web Firewall
Windows host process (Rundll32)
The following network access problems were detected
There are no rules for this application
You can allow, block or customize application network access. You can choose either one of predefined rules or create your own application rule
Apply predefined rule
Allow network connection for application on port 389 (ldap)
Create custom rule
The network application was launched by unknown process
If you are not sure that the application should be allowed to start network processes, you should block this action for the application
Description
Allow
Block
Publisher
Path
Print driver host for 32bit applications
Micro...
C:\windows\splwow64.exe
Microsoft Office Word
Micro...
C:\program files (x86)\microsoft office\office11
OK
Cancel

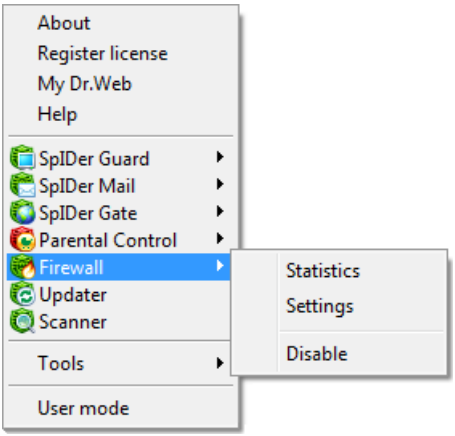
You need administrative rights to create rules.

10.2. Managing Dr.Web Firewall

Dr.Web Firewall installs as a network component and loads on Windows startup. If necessary, you can suspend **Dr.Web Firewall** operation, review its statistics, or change settings.

After a session under limited user account (Guest) is open **Firewall** displays an access error message. Firewall status is then displayed as inactive in **SpIDer Agent**. However, **Firewall** is enabled and operates with default settings or settings set earlier in administrative mode.

SpIDer Agent provides you with the main **Dr.Web Firewall** management and configuration features. Click the **SpIDer Agent** icon and select the **Firewall** group to access them:



Settings and **Disable**/**Enable** items are not available in User mode.

Option	Description
Statistics	Displays information on events which **Dr.Web Firewall** handled.
Settings	Opens **Dr.Web Firewall** settings. You can restore settings to their default values on the **Restore defaults** page of **Dr.Web Security Space** Main settings.
Disable/Enable	Suspends or resumes **Dr.Web Firewall** operation. The **Enable** option displays in the menu only when operation was temporary suspended.

Temporal Suspension

You can temporary suspend anti-virus checks that **Dr.Web Firewall** runs on incoming and outgoing HTTP traffic.

This option is not available in User mode.

Be cautious when using this option.

To disable Dr.Web Firewall

Click the **SpIDer Agent** icon in the notification area, select **Firewall,** and then select **Disable.**

To disable **Dr.Web Firewall**, enter confirmation code or password (if you set **Protect Dr.Web settings by password** checkbox on the **Self-protection** page in **Dr.Web Security Space** Main settings).

To enable Dr.Web Firewall

Click the **SpIDer Agent** icon in the notification area, select **Firewall,** and then select **Enable.**

10.3. Firewall settings

You need administrative rights to access **Dr.Web Firewall** settings.

To start using **Dr.Web Firewall**, do the following:

- Select operation mode
- List authorized applications

Dr.Web Firewall loads on Windows startup and starts logging events. By default, **Dr.Web Firewall** operates in training mode.

If any problems occur with Internet Connection Sharing (i.e. access to the Internet is blocked for computers that are connected to a host computer), on the host computer specify packet filter rule that allows all packets from the subnet, according to your local configuration.

SpIDer Agent provides you with the mail **Dr.Web Firewall** management and configuration features. The default settings are optimal for most uses. Do not change them unnecessarily.

To configure Dr.Web Firewall

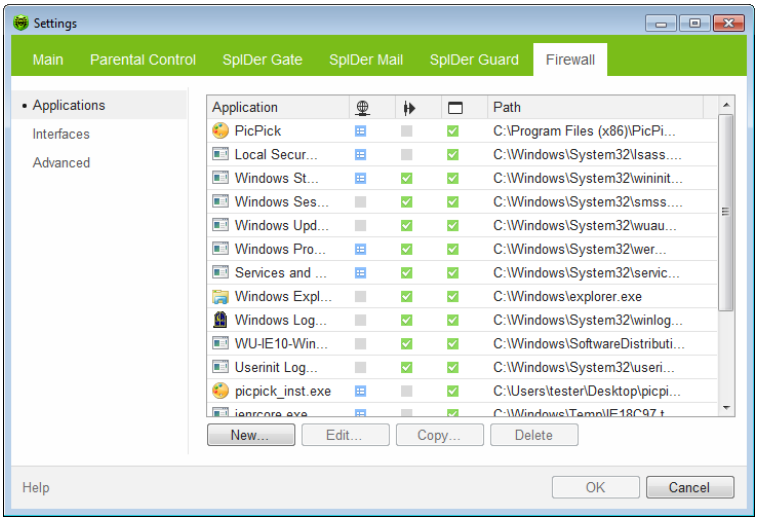
1. Click the **SpIDer Agent** icon in the notification area, select **Firewall**, and then select **Settings**. The **Firewall** tab of the settings window opens that contains the following pages:
   - The Applications page, where you can configure filtering parameters for applications.
   - The Interfaces page, where you can configure filtering parameters on network packet level.
   - The Advanced page, where you can select a **Dr.Web Firewall** operation mode.
2. Configure options as necessary. To get information on options in the page, click **Help.**

3. After editing, click **OK** to save the changes or **Cancel** to cancel them.

10.3.1. Applications Page

Application level filtering helps you control access of various application and processes to network resources as well as enable or disable the applications to run other processes. You can create rules for both system and user applications.

Dr.Web Firewall allows you to create no more than one set of rules per each application.



This page lists all applications and processes for which there is an application filter rule set. Each application is explicitly identified by the path to its executable file. **Dr.Web Firewall** uses the SYSTEM name to indicate the rule set applied to the operating system kernel (the system process for which there is no unique executable file).

If the application file, for which the rule was created, changes (e.g., due to update installation) then **Dr.Web Firewall** asks to confirm that the application is still allowed to access network resources.

To configure rule sets

In the **Dr.Web Firewall** settings window, select the **Applications** page and do one of the following:

- to add a new set of rules, click **New.**
- to edit an existing set of rules, select the rule set in the list and click **Edit.**
- to add a copy of existing set of rules, select the rule set and click **Copy.** The copy is added after the selected rule set.
- to delete all rules for an application, select the appropriate rule set and click **Delete.**

If you created a blocking rule for a process or set **Block unknown connections** mode on Advanced page, and then disabled the rule or changed the work mode, the process will be blocked till it's next attempt to establish connection.

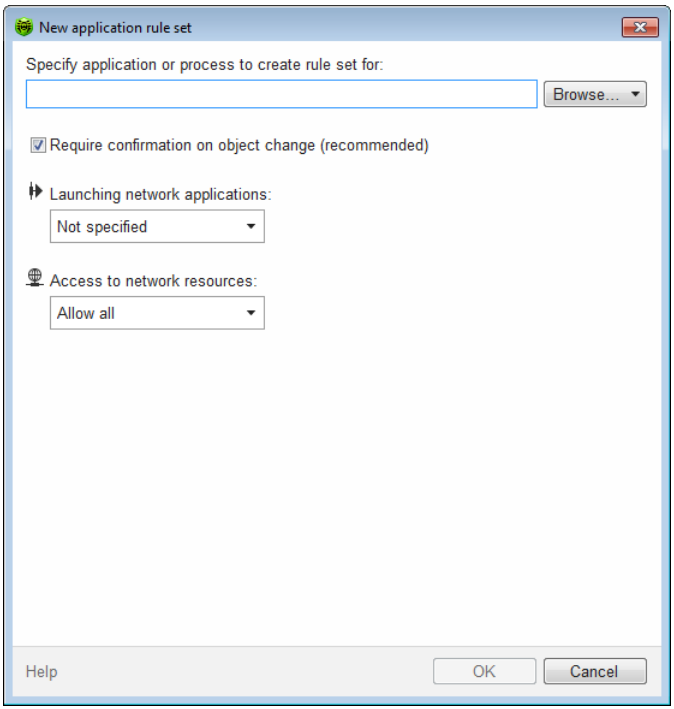
Application Rules

In the **New application rule set** (or **Edit application rule set**) window you can configure access to network resources as well as enable or disable launching of other applications.

When **Dr.Web Firewall** is operating in learning mode, you can start creating a new rule directly from the windows with notification on an unknown connection attempt.

To open this window

In the **Dr.Web Firewall** settings window, select the **Applications** page and click **New** or select an application and click **Edit**.



Access to network resources

1. Specify the access type:
   - **Allow all –** all connections will be allowed;
   - **Block all –** all connections will be blocked;
   - **Not specified –** settings specified for the selected operation mode of **Firewall**are used;
   - **Custom –** in this mode you can create a set of rules, that will allow or block different connections.

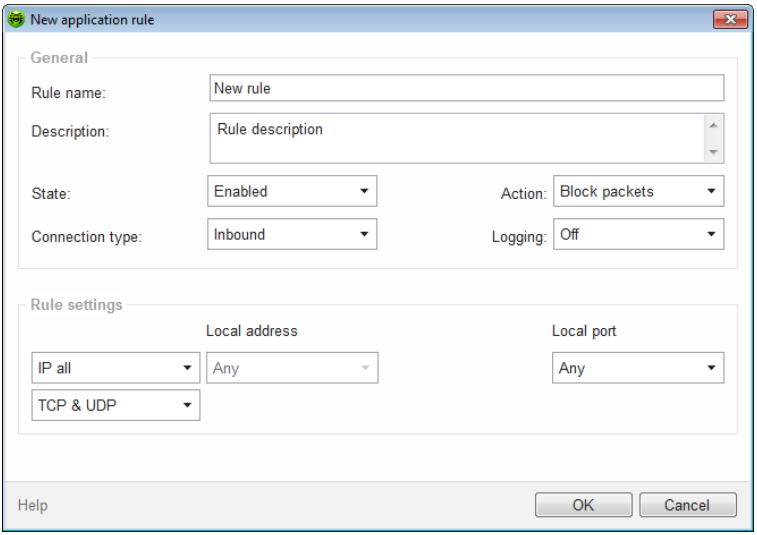
2. If you chose **Custom** type, create filtering rules using the following options:
   - to add a new rule, click **New.** The new rules is added to the end of the list.
   - to modify a rule, select it and click **Edit.**
   - to add a copy of a rule, select the rule and click **Copy.** The copy is added after the selected rule.
   - to delete a rule, select it and click **Delete.**
3. If you selected to create or edit a rule, in the open window, then configure rule settings.
4. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

For each rule in the set, the following information displays:

Column	Description
Enabled	Execution states for the rule.
Action	The action for **Dr.Web Firewall** to perform when the connection attempt is detected: • **Block packets** • **Allow packets**
Rule name	The rule name.
Connection type	The party which initiates the connection: • **Inbound** – the rule is applied when someone from the network attempts to connect to the application on your computer. • **Outbound** – the rule is applied when the application on your computer attempt to connect to the network. • **Any** – the rule is applied regardless of who initiate the connection.
Description	The rule description.

Rule Settings

Application filtering rules control interaction of a particular application with certain network hosts.



To add or edit a rule

1. Configure the following parameters:

Parameter	Description
General	
Rule name	The rule name.
Description	The rule description.
State	One of the following execution states for the rule: • **Enabled** – apply rule for all matching connection attempts. • **Disabled** – do not apply the rule yet.

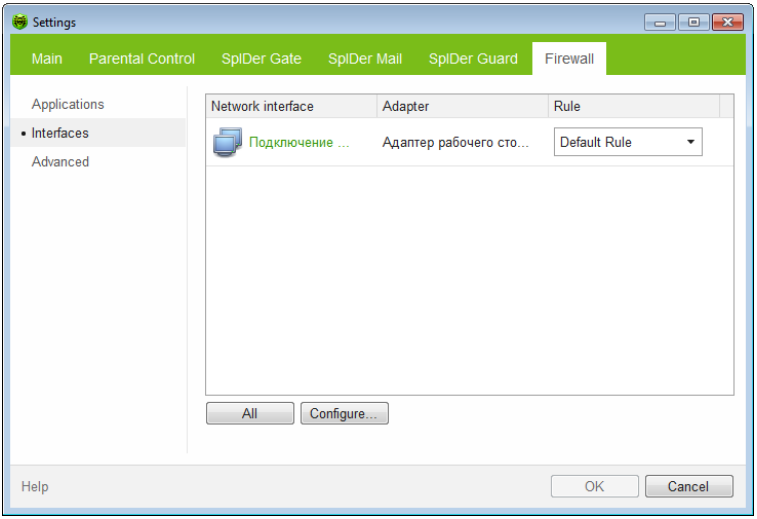
Parameter	Description
Connection type	The party which initiates the connection: • **Inbound** – apply the rule when someone from the network attempts to connect to the application on your computer. • **Outbound** – apply the rule when the application on your computer attempt to connect to the network. • **Any** – apply the rule regardless of who initiate the connection.
Action	The action for **Dr.Web Firewall** to perform when the connection attempt is detected: • **Block packets** • **Allow packets**
Rule Settings	
Protocol	The network and transport level protocols used for the connection attempt. **Dr.Web Firewall** supports the following network level protocols: • **IPv4** • **IPv6** • **IP all** – any version of IP protocol **Dr.Web Firewall** supports the following transport level protocols: • **TCP** • **UDP** • **TCP & UDP** – TCP or UDP protocol • **RAW**
Inbound/ Outbound address	The IP address of the remote host. You can specify either a specific address (**Equals**) or several IP addresses using a range (**In range**), specific subnetwork mask (**Mask**), or masks of all subnetworks, in which your computer has network addresses (**MY_NETWORK**). To apply the rule for all remote hosts, select **Any.**

Parameter	Description
Inbound/ Outbound port	The port used for connection. You can specify either a specific port number (**Equals**) or a port range (**In range**). To apply the rule for all ports, select **Any**.

2. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

10.3.2. Interfaces Page

On the **Interfaces** page you can select a rule set to use for filtering packets transmitted through different network interfaces installed on your computer.



To defile rule sets for network interfaces

1. In the **Dr.Web Firewall** settings window, select **Interfaces**.
2. For an interface of interest, select the appropriate ruleset. If the ruleset does not exist, you can create a new set of packet filtering rules.
3. Click **OK** to save changes, or click **Cancel** to close the window without saving changes.

To list all available interfaces, click **All**. This opens a windows where you can selected interfaces that should be listed in the table permanently. Active interfaces are listed in the table automatically.

To configure rules for interfaces, click **Configure**.

Packet Filter

Packet filtering allows you to control access to network regardless of which program initiates connection. **Dr.Web Firewall** applies these rules to network packets transmitted through network interfaces of your computer.

Packet filtering allows you to control access to networks on a lower level than the application filter thus providing you with more flexible options.

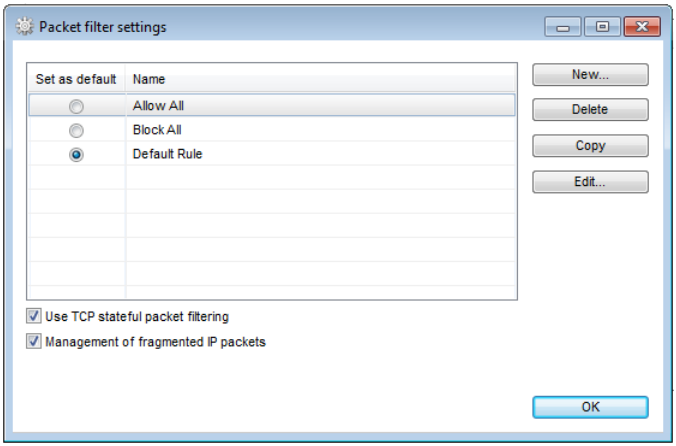
Dr.Web Firewall provides you the following default filtering rule sets:

- **Allow All** – this rule set configures **Dr.Web Firewall** to pass through all packets.
- **Deny All** – this rule set configures **Dr.Web Firewall** to block all packets.
- **Default Rule** – this set includes rules describing the most popular system configurations and preventing common network attacks. This rule set is used by default for new network interfaces.

For fast switching between filtering modes, you can create custom sets of filtering rules.

To set rulesets for network interfaces

1. In the **Dr.Web Firewall** settings window, select **Packet filter** page.
2. Do one of the following:
   - Configure sets of filtering rules by adding new rules, modifying or deleting existing ones, or changing order of their execution.
   - Configure general filtering settings.



To configure sets of filtering rules

Do one of the following:

- To add a new rule set, click **New.** The new rule set is added to the beginning of the list.
- To edit an existing set of rules, select the rule set in the list and click **Edit.**
- To add a copy of existing set of rules, select the rule set and click **Copy.** The copy is added after the selected rule set.
- To delete a selected rule set, click **Delete.**

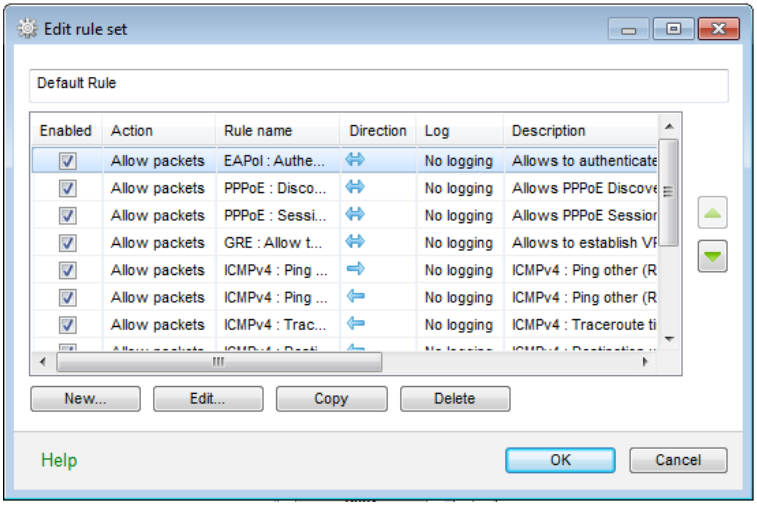
To configure general settings

On the **Packet Filter settings**, use the following options:

Option	Description
Use TCP stateful packet filtering	Select this checkbox to filter packets according to the state of existing TCP connections. **Dr.Web Firewall** will block packets that do not match active connections according to the TCP protocol specification. This option helps protect your computer from DoS attacks (denial of service), resource scanning, data injection and other malicious operations. It is also recommended to enable stateful packet filtering when using complex data transfer protocols such as FTP, SIP, etc. Clear this checkbox to filter packets without regard to state of TCP sessions.
Management of fragmented IP packets	Select this checkbox to ensure correct processing of large amounts of data. The maximum transmission unit (MTU) may vary for different networks, therefore large IP packets may be received fragmented. When this option is enabled, **Dr.Web Firewall** applies the rule selected for the first fragment of a large IP packet to all other fragments. Clear this checkbox to process fragmented packets independently.

Packet Filter Rulesets

The **New packet ruleset** (or **Edit ruleset**) window lists packet filtering rules for the selected rule set. You can configure the list by adding new rules or modifying existing rules and the order of their execution. The rules are applied according to their order in the set.



For each rule in the set, the following information displays:

Column	Description
Enabled	Execution states for the rule.
Action	The action for **Dr.Web Firewall** to perform when the packet is intercepted: • **Block packets** • **Allow packets**
Rule name	The rule name.

Column	Description
Direction	The packet sender: • – the rule is applied when packet is received from the network. • – the rule is applied when packet is sent into the network from your computer. • – the rule is applied regardless of packet transfer direction.
Log	The logging mode for the rule. This parameter defines which information is stored in the **Dr.Web Firewall** log: • **Log headers –** the packet header only. • **Entire packet –** the whole packet. • **No logging –** no information is logged.
Description	The rule description.

You can configure the list by adding new rules for the application or modifying existing rules and the order of their execution. The rules are applied according to their order in the set.

To configure rulesets

1. If you select to create or edit an existing rule set on the **Packet filtering settings** page, in the opened window, specify the name for the rule set.
2. Use the following options to create filtering rules:
   - to add a new rule, click **New**. The new rule is added to the beginning of the list.
   - to modify a rule, select it and click **Edit**.
   - to add a copy of a rule, select the rule and click **Copy**. The copy is added after the selected rule.
   - to delete a rule, select it and click **Delete**.
3. If you selected to create or edit a rule, configure rule settings in the opened window.
4. Use the arrows next to the list to change the order of rules. The rules are applied according to their order in the set.

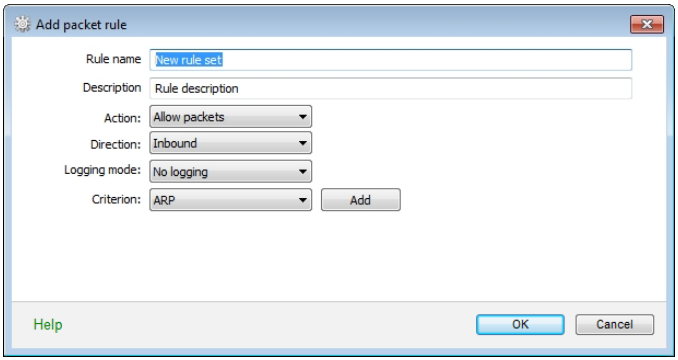
5. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

Packets with no rules in a rule set are blocked automatically except packets allowed by Application Filter rules.

Packet Filter Rules

To add or edit a rule

1. In the packet filter rule set creation or modification window, click **New** or **Edit**. This opens a rule creation or rule modification window.



2. Configure the following parameters:

Parameter	Description
Rule name	The rule name.
Description	The rule description.

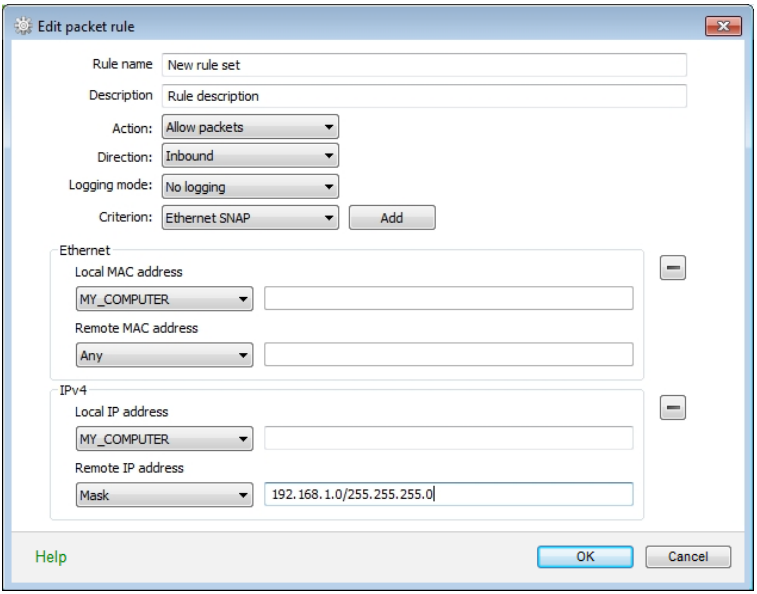
Parameter	Description
Action	The action for **Dr.Web Firewall** to perform when the packet is intercepted: • **Block packets** • **Allow packets**
Direction	The packet sender: • **Inbound** – apply the rule when packet is received from the network. • **Outbound** – apply the rule when packet is sent into the network from your computer. • **Any** – apply the rule regardless of packet transfer direction.
Logging mode	The logging mode for the rule. This parameter defines which information is stored in the **Dr.Web Firewall** log: • **Log headers** – log packet headers only. • **Entire packet** – log whole packets. • **No logging** – do not log any information.
Criterion	Filtering criterion. E.g. transport or network protocol. To add a filtering criterion, select a criterion from the list and click **Add.** You can add any number of filtering criteria. For some headers there are additional criteria available.

3. When you finish adjusting the settings, click **OK** to save changes or **Cancel** to reject them.

If you do not add any criterion, then the rule will allow or block all packets depending on the **Action** field.

Example:

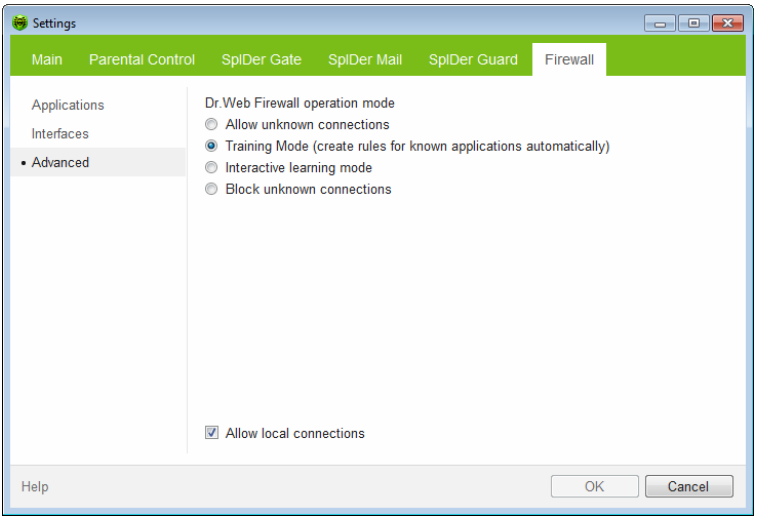
Adding a packet filter that allows all packets from a sub-network, may look as follows:



If you select value **Any** for the **Local IP address** and **Remote IP address** fields, then the rule will be passed for any packet that contains an IPv4 header and was sent from a physical address of the local computer.

10.3.3. Advanced Page

On the **Advanced settings** page, you can select a default action, which **Dr.Web Firewall** should execute when it detects a new (unknown to the firewall) connection attempt, and configure advanced settings. These rules are applied on the application level.



To set operation mode

1. In the **Dr.Web Firewall** settings window, select **Advanced**.
2. Select one of the following operation modes:
   - **Allow unknown connections** – free access mode, when all unknown applications are permitted to access networks
   - (Default) **Training mode (create rules for known applications automatically)** – learning mode, when rules for known applications are created automatically
   - Interactive learning mode

- **Block unknown connections** – restricted access mode, when all unknown connections are blocked. For known connections, **Dr.Web Firewall** applies the appropriate rules

3. Click **OK** to save changes, or click **Cancel** to close the window without saving changes.

Free Access Mode

In this mode, **Dr.Web Firewall** allows all unknown applications to access network recourses including the Internet. No notification on access attempt is displayed.

Learning Mode

In this mode, you have total control over **Dr.Web Firewall** reaction on unknown connection detection, thus training the program while you working on the computer.

When a user application or operating system attempts to connect to a network, **Dr.Web Firewall** checks if there is a filtering rule set for the application. If there are no filtering rules, **Dr.Web Firewall** prompts you to select a temporary solution, or create a rule which will be applied each time **Dr.Web Firewall** detects this type of connection.

This mode is used by default.

Training Mode

In this mode, rules for known applications are created automatically. For other apllications you have control over **Dr.Web Firewall** reaction.

When a user application or operating system attempts to connect to a network, **Dr.Web Firewall** checks if there is a filtering rule set for the application. If there are no filtering rules, **Dr.Web Firewall** prompts you to select a temporary solution, or create a rule which will be applied each time **Dr.Web Firewall** detects this type of connection.

Restricted Access Mode

In this mode, **Dr.Web Firewall** blocks all unknown connections to network resources including the Internet automatically.

When a user application or operating system attempts to connect to a network, **Dr.Web Firewall** checks if there is a filtering ruleset for the application. If there are no filtering rules, **Dr.Web Firewall** blocks network access for the application without displaying any notification to the user. If there are filtering rules for the application, **Dr.Web Firewall** processes the connection according to the specified actions.

Advanced Settings

Select the **Allow loopback interface** checkbox to allow all applications on you computer to interconnect (i.e. allow unlimited connections between application installed on your computer). For this type of connection, no rules will be applied. Clear this checkbox to apply rules for connections carried out both through the network and within your computer.

10.4. Event Logging

Dr.Web Firewall registers connection attempts and network packets. The statistics windows provides access to the following logs:

- Application Filter Log (**Application journal**), which contains information on network connection attempts from various applications and rules applied to process each attempt.
- Packet Filter Log (**Packet Filter journal**), which contains information on network packets processed by **Firewall**, rules applied to process the packets, and network interfaces used to transmit the packets. Details level depends on settings of each packet application rule.

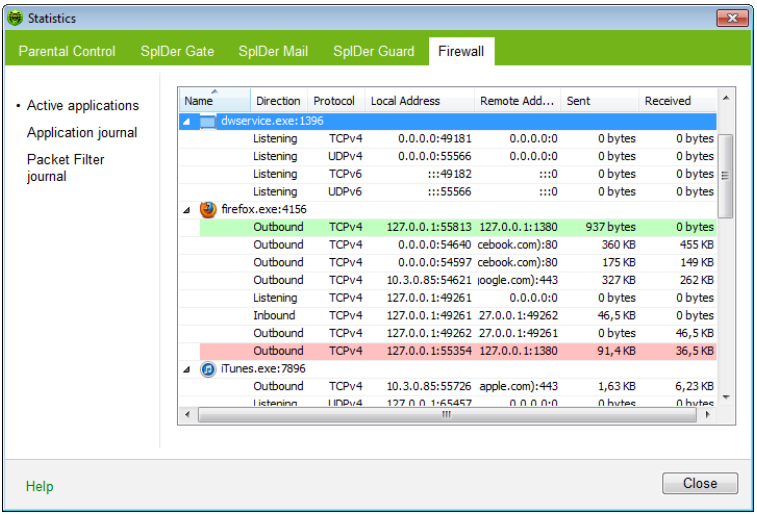
The **Active applications** page displays applications currently connected to a network.

To open this window

Click the **SpIDer Agent** icon in the notification area, select **Firewall,** and then select **Statistics.**

10.4.1. Active Applications

The list of active applications displays information on programs accessing network resources at the moment.


Statistics
Parental Control
SplDer Gate
SplDer Mail
SplDer Guard
Firewall
Active applications
Application journal
Packet Filter journal
Name
Direction
Protocol
Local Address
Remote Add...
Sent
Received
dwservice.exe:1396
Listening TCPv4 0.0.0.0:49181 0.0.0.0:0 0 bytes 0 bytes
Listening UDPv4 0.0.0.0:55566 0.0.0.0:0 0 bytes 0 bytes
Listening TCPv6 :::49182 :::0 0 bytes 0 bytes
Listening UDPv6 :::55566 :::0 0 bytes 0 bytes
firefox.exe:4156
Outbound TCPv4 127.0.0.1:55813 127.0.0.1:1380 937 bytes 0 bytes
Outbound TCPv4 0.0.0.0:54640 cebook.com):80 360 KB 455 KB
Outbound TCPv4 0.0.0.0:54597 cebook.com):80 175 KB 149 KB
Outbound TCPv4 10.3.0.85:54621 oogle.com):443 327 KB 262 KB
Listening TCPv4 127.0.0.1:49261 0.0.0.0:0 0 bytes 0 bytes
Inbound TCPv4 127.0.0.1:49261 27.0.0.1:49262 46,5 KB 0 bytes
Outbound TCPv4 127.0.0.1:49262 27.0.0.1:49261 0 bytes 46,5 KB
Outbound TCPv4 127.0.0.1:55354 127.0.0.1:1380 91,4 KB 36,5 KB
iTunes.exe:7896
Outbound TCPv4 10.3.0.85:55726 apple.com):443 1,63 KB 6,23 KB
Help
Close

For each application, the following information on active connection is available:

Column	Description
Name	The name of the application.
Direction	The party which initiated the connection: • **Inbound** – the rule is applied when someone from the network attempted to connect to the application on you computer. • **Outbound** – the rule is applied when the application on your computer attempted to connect to the network. • **Listening** – the rule is applied when the application on your computer is awaiting for a connection attempt from the network.

Column	Description
Protocol	The protocol used to transmit data.
Local address	The protocol and host address from which comes an attempt to connect.
Remote address	The protocol and host address to which the connection is attempted.
Sent	The number of bytes sent through this connection.
Received	The number of bytes received through this connection.

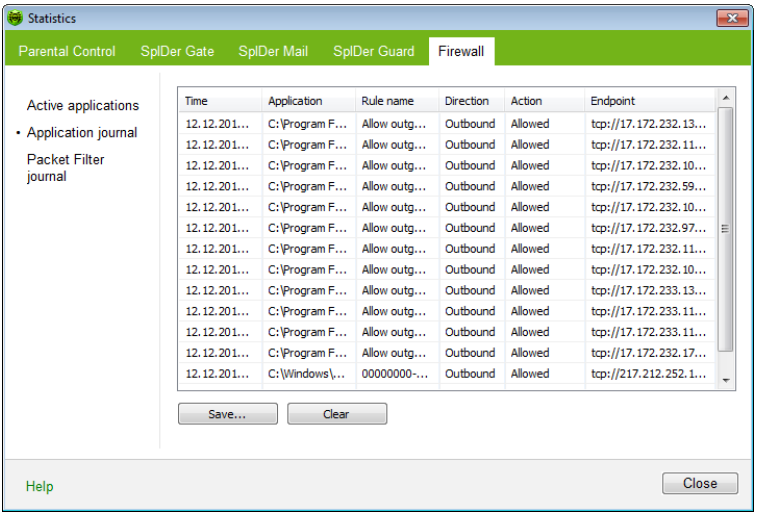
In the active connections statistics window you can terminate any active process by right-clicking the process in the table and selecting **Terminate process**.

To terminate any active process you need administrative privileges. Otherwise, you can terminate only those processes that are run under your account.

From the context menu you can also block an active or unblock a disabled connection. The blocked connections are marked with red in the table.

10.4.2. Application Filter Log

The application filter log stores information on all attempts of applications installed on your computer to connect to a network.



Column	Description
Time	The date and time of the connection attempt.
Application	The full path to the application executable file, its name and process identification number (PID).
Rule name	The name of the rule applied.
Direction	The party which initiated the connection: • **Inbound** – someone from the network attempted to connect to the application on you computer. • **Outbound** – the application on your computer attempted to connect to the network. • **Any** – the rule was applied regardless of who initiated the connection.

Column	Description
Action	The action **Dr.Web Firewall** performed when the connection attempt was detected: • **Block packets** • **Allow packets**
Endpoint	The protocol, IP-address and the port used for the connection.

On this page you can save the information to a file or clear the log.

To save application filter log

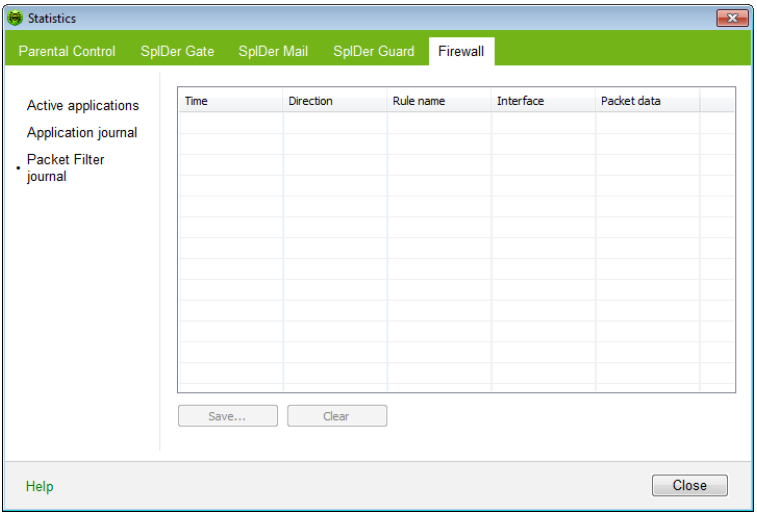
Click **Save**, then enter the file name where to store the log.

To clear application filter log

Click **Clear**. All information will be deleted from the log.

10.4.3. Packet Filter Log

The packet filter log stores information on packets transmitted through all network interfaces installed on you computer, if **Log headers** or **Entire packet** logging mode was set for these packets. If **No logging** mode was set for a packet, no information is stored.



Column	Description
Time	The date and time when the packet was processed.
Direction	The packet sender: • – the packet was transmitted from the network to your computer. • – the packet was transmitted from your computer to the network. • – the packet sent from the network to your computer was blocked. • – the packet sent from your computer to the network was blocked.

Column	Description
Rule name	The name of the applied rule.
Interface	The interface used to transmit the packet.
Packet data	Packet details. The **Logging mode** setting of the rule determines the amount of stored data.

On this page, you can save the information to a file or clear the log.

To save packet filter log

Click **Save**, then enter the file name where to store the log.

To clear packet filter log

Click **Clear**. All information will be deleted from the log.

11. Automatic Updating

Anti-virus solutions of **Doctor Web** use **Dr.Web virus databases** to detect computer threats. These databases contain details and signatures for all virus threats known at the moment of the product release. However, modern virus threats are characterized by high-speed evolvement and modification. Within several days and sometimes hours, new viruses and malicious programs emerge. To mitigate the risk of infection during the licensed period, **Doctor Web** provides you with regular updates to virus databases and product components, which are distributed via the Internet. With the updates, **Dr.Web Security Space** receives information required to detect new viruses, block their spreading and sometimes cure infected files which were incurable before. From time to time, the updates also include enhancements to anti-virus algorithms and fix bugs in software and documentation.

Dr.Web Updater helps you download and install the updates during the licensed period.

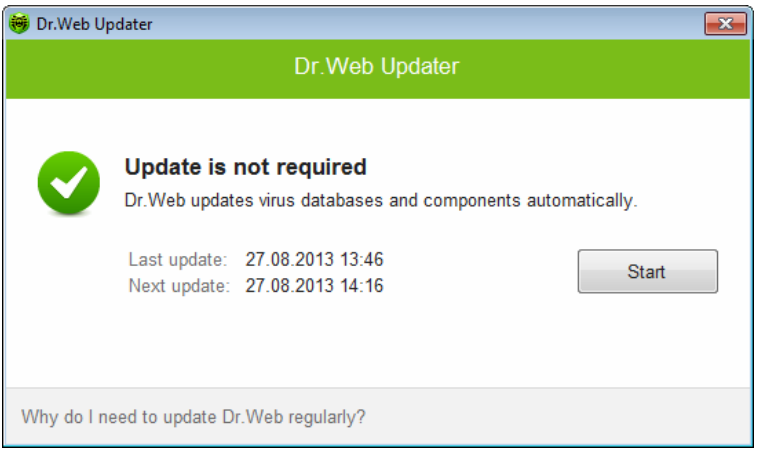
11.1. Running Updates

You can run **Updater** in one of the following ways:

- From the command line by running drwupsrv.exe file located in the **Dr.Web Security Space** installation folder
- By selecting **Update** in the **SpIDer Agent** menu

On launching, **Updater** displays a window with information on relevance of **Dr.Web virus databases** and **Dr.Web Security Space** components. If necessary, you can start an update process. Update parameters can be configured on the **Update** page of **Dr.Web Security Space** Main settings.

If launching **Dr.Web Updater** automatically, changes are logged into dwupdater.log file that is located in the %allusersprofile%\Application Data\Doctor Web\Logs\ folder (in Windows 7, %allusersprofile%\Doctor Web\Logs\).


Dr.Web Updater
Dr.Web Updater
Update is not required
Dr.Web updates virus databases and components automatically.
Last update: 27.08.2013 13:46
Next update: 27.08.2013 14:16
Start
Why do I need to update Dr.Web regularly?

Update Procedure

Before starting an update, **Updater** checks if you have a key file registered (license or demo). If no key file is found, **Updater** suggests you to obtain a key file on the Internet through the user registration procedure.

If the key file is found, **Updater** checks its validity at **Doctor Web** servers (the file can be blocked, if discredited, i.e. its illegal distribution is uncovered). If your key file is blocked due to misuse, **Updater** displays an appropriate warning, terminates the update, and blocks Dr.Web components.

If the key is blocked, contact the dealer from which you purchased **Dr.Web Security Space**.

After the key file is successfully verified, **Updater** downloads and installs all updated files automatically according to your version of **Dr.Web Security Space**. If your subscription terms allow upgrade to newer software versions, **Updater** also downloads and installs a new version of **Dr.Web Security Space** when released.

After an update of **Dr.Web Security Space** executable files or libraries, a program restart may be required. In such cases, **Updater** displays an appropriate warning.

Scanner, **SpIDer Guard** and **SpIDer Mail** start using the updated databases automatically.

When the **Updater** is launched in the command line mode, the command line parameters can be used (see Appendix A).

Appendices

Appendix A. Command Line Parameters

Additional command line parameters (switches) are used to set parameters for programs which can be launched by opening an executable file. This relates to **Scanner**, **Console Scanner** and to **Dr.Web Updater**. The switches can set the parameters unavailable in the configuration file and have a higher priority then the parameters which are specified in it.

Switches begin with the forward slash "/" character and are separated with blanks as other command line parameters.

The Scanner and Console Scanner Parameters

/AA – apply actions to detected threats automatically. (Only for **Scanner**).

/AC – check installation packages. Option is enabled by default.

/AFS – use forward slash to separate paths in archive. Option is disabled by default.

/AR – check archives. Option is enabled by default.

/ARC: <*ratio*> – maximum archive object compression. If the compression rate of the archive exceed the limit, scanner neither unpacks, not scans the archive (unlimited).

/ARL: <*level*> – maximum archive level (unlimited).

/ARS: <*size*> – maximum archive size. If the archive size exceed the limit, scanner neither unpacks, nor scans the archive (unlimited, KB).

/ART: <*size*> – minimum size of file inside archive beginning from which compression ratio check will be performed (unlimited, KB).

/ARX: <*size*> – maximum size of objects in archives that should be checked (unlimited, KB).

/BI – show information on **Dr.Web virus databases**. Option is enabled by default.

/DR – scan folders recursively (i.e., scan subfolders). Option is enabled by default.

/E: <*engines*> – perform scanning in specified number of threads.

/FAST – perform an express scan of the system. (For **Scanner** only.)

/FL: <*path*> – scan files listed in the specified file.

/FM: <*masks*> – scan files matching the specified masks. By default, all files are scanned.

/FR: <*regexpr*> – scan files matching the specified regular expression. By default, all files are scanned.

/FULL – perform a full scan of all hard drives and removable data carriers (including boot sectors). (For **Scanner** only.)

/FX: <*masks*> – exclude from scanning files that match the mask. (For **Console Scanner** only.)

/H or /? – show brief help. (For **Console Scanner** only.)

/HA – use heuristic analysis to detect unknown threats. Option is enabled by default.

/KEY: <*keyfile*> – specify a license key. It is necessary to use this parameter if your key file is stored outside of the **Dr.Web** installation folder where the scanner executables reside (by default, the drweb32.key or another suitable file from the C:\Program Files\DrWeb\ folder is used).

/LITE – perform a basic scan of random access memory, boot sectors of all disks and startup objects. **Scanner** also runs a check on rootkits. (For **Scanner** only.)

/LN – resolve shell links. Option is disabled by default.

/LS – use LocalSystem account rights. Option is disabled by default.

/MA – check e-mail. Option is enabled by default.

/MC: <*limit*> – set maximum number of cure attempts to 'limit' (unlimited by default).

/NB – do not backup cured or deleted files. Option is disabled by default.

/NI[:X] – limits usage of system resources at scanning and priority of the scanning process (unlimited, %).

/NOREBOOT – cancel system reboot or shut down after scanning. (For **Scanner** only.)

/NT – check NTFS streams. Option is enabled by default.

/OK – display the full list of scanned objects showing Ok for clean files. Option is disabled by default.

/P: <*prio*> – priority of the current scanning task:

0 – the lowest,

L – low,

N – general. Priority by default,

H – high,

M – maximal.

/PAL: <*level*> – maximum pack level. Value is 1000 by default.

/QL – list quarantined files on all disks. (For **Console Scanner** only.)

/QL: <*logical_drive_name*> – list quarantined files on the specified drive (letter). (For **Console Scanner** only.)

/QNA – double quote file names.

/QR[:[d][:p]] – delete quarantined files on drive <*d*> (letter) that are older than <*p*> days (number). If <*d*> is not specified, then files are deleted on all drives; if <*d*> is not specified, then all quarantined files are deleted regarding of their age (0 days). (For **Console Scanner** only.)

/QUIT – terminate **Dr.Web Scanner** once scanning completes whenever or not the detected threats are neutralized. (For **Scanner** only.)

/RA: <*file.log*> – append the specified file with the current scanning report. By default, report is not generated.

/REP – follow symbolic links while scanning. Option is disabled by default.

/RP: <*file.log*> – rewrite the specified file with the current scanning report. By default, report is not generated.

/RPC: <*secs*> – **Dr.Web Scanning Engine** connection timeout. Timeout is 30 seconds by default. (For **Console Scanner** only.)

/RPCD – use dynamic RPC identification. (For **Console Scanner** only.)

/RPCE – use dynamic RPC endpoint. (For **Console Scanner** only.)

/RPCE: <*name*> – use specified RPC endpoint. (For **Console Scanner** only.)

/RPCH: <*name*> – use specified host name for remote call. (For **Console Scanner** only.)

/RPCP: <*name*> – use specified RPC protocol. Possible protocols: lpc, np, tcp. (For **Console Scanner** only.)

/SCC – show content of complex objects (archives, e-mail attachments, file containers). Option is disabled by default.

/SCN – show name of installation package. Option is disabled by default.

/SILENTMODE – perform a background scan. On threat detection, the **Dr.Web Scanner** window opens and displays the list of detected threats. Otherwise, the window does not display. (For **Scanner** only.)

/SLS – show log on the screen. Option is enabled by default. (For **Console Scanner** only.)

/SPN – show names of packers. Option is disabled by default.

/SPS – display scan progress on the screen. Option is enabled by default. (For **Console Scanner** only.)

/SST – display object scan time. Option is disabled by default.

/TB – check boot sectors including master boot record (MBR) of the hard drive.

/TM – check processes in memory including Windows system control area.

/TR – check system restore points.

/TS – check autorun objects including object in the Autorun folder, system ini files, and Windows registry.

/W: <*sec*> – maximum time to scan (unlimited, sec).

/WCL – drwebwcl compatible output. (For **Console Scanner** only.)

/X:S[:R] – set power state shutDown/Reboot/Suspend/Hibernate with reason 'R' (for shutdown/reboot).

Action for different objects ('C' – cure, 'Q' – move to quarantine, 'D' – delete, 'I' – ignore, 'R' – inform. 'R' is available for **Console Scanner** only. 'R' is set by default for all objects in **Console Scanner**):

/AAD:X – action for adware ('R', possible DQIR).

/AAR:X – action for infected archives ('R', possible DQIR).

/ACN:X – action for infected installation packages ('R', possible DQIR).

/ADL:X – action for dialers ('R', possible DQIR).

/AHT:X – action for hacktools ('R', possible DQIR).

/AIC:X – action for incurable files ('R', possible DQR).

/AIN:X – action for infected files ('R', possible CDQR).

/AJK:X – action for jokes ('R', possible DQIR).

/AML:X – action for infected e-mail files ('R', possible QIR).

/ARW:X – action for riskware ('R', possible DQIR).

/ASU:X – action for suspicious files ('R', possible DQIR).

Several parameters can have modifiers that clearly enable or disable options specified by these keys. For example:

/AC-	option is clearly disabled,
/AC, /AC+	option is clearly enabled.

These modifiers can be useful if option was enabled or disabled by default or was set in configuration file earlier. Keys with modifiers are listed below:

/AC, /AFS, /AR, /BI, /DR, /HA, /LN, /LS, /MA, /NB, /NT, /OK, /QNA, /REP, /SCC, /SCN, /SLS, /SPN, /SPS, /SST, /TB, /TM, /TR, /TS, /WCL.

For /FL parameter '–' modifier directs to scan paths listed in specified file and then delete this file.

For `/ARC`, `/ARL`, `/ARS`, `/ART`, `/ARX`, `/NI[:X]`, `/PAL`, `/RPC` and `/W` parameters '0' value means that there is no limit.

Example of using command line parameters with **Console Scanner**:

```
[ <path_to_file>] dwscancl /AR- /AIN:C /AIC:Q C:\
```

scan all files on disk 'C:', excluding those in archives; cure the infected files and move to quarantine those that cannot be cured. To run **Scanner** the same way, type the `dwscanner` command name instead of `dwscancl`.

Dr.Web Updater Command Line Parameters

Common options

Parameter	Description
-h [--help]	Show this message.
-v [--verbosity] arg	Log level. Can be one of following: error, info, debug.
-d [--data-dir] arg	Directory where repository and settings are located.
--log-dir arg	Directory for storing log file.
--log-file arg (=dwupdater.log)	Log file name.
-r [--repo-dir] arg	Repository directory, (<data_dir>/repo by default).
-t [--trace]	Enable tracing.
-c [--command] arg (=update)	Command to execute: getversions, getcomponents, getrevisions, init, update, uninstall, exec, download and keyupdate.
-z [--zone] arg	List of the zones that should be used instead of specified in configuration file.

init command parameters

Parameter	Description
-s [--version] arg	Version name.
-p [--product] arg	Product name.
-a [--path] arg	Product directory path. This directory will be used as default directory for all components included in product. **Dr.Web Updater** will search for a key file in this directory.
-n [--component] arg	Component name and installation folder. *<Name>*, *<install path>*.
-u [--user] arg	Username for proxy server.
-k [--password] arg	Password for proxy server.
-g [--proxy] arg	Proxy-server for updating. *<Address>*:*<port>*
-e [--exclude] arg	Component name that will be excluded from product during installation.

update command parameters

Parameter	Description
-p [--product] arg	Product name. If specified, only this product will be updated. If nothing is specified, all products will be updated. If components are specified, only these components will be updated.
-n [--component] arg	Components that should be updated to specified version. *<Name>*, *<target revision>*.
-x [--selfrestart] arg (=yes)	Reboot after updating of **Dr.Web Updater**. Default value is `yes`. If value is set to `no`, reboot required notification will appear
--geo-update	Attempt to get list of IP-addresses from update.drweb.com before updating.

Parameter	Description
--type arg (=normal)	One of the following: • reset-all – reset revision to 0 for all components • reset-failed – reset revision to 0 for failed components • normal-failed – try to update all components including failed from current revision to newest or specified • update-revision – try to update all components of current revision to newest if exists • normal – update all components
-g [--proxy] arg	Proxy-server for updating. *<Address>:<port>*
-u [--user] arg	Username for proxy server.
-k [--password] arg	Password for proxy server.
--param arg	Pass additional parameters to the script. *<Name>*: *<value>*.
-l [--progress-to-console]	Print information about downloading and script execution to console.

exec command parameters

Parameter	Description
-s [--script] arg	Execute this script.
-f [--func] arg	If specified execute this function in the script.
-p [--param] arg	Pass additional parameters to the script. *<Name>*: *<value>*.
-l [--progress-to-console]	Print information about script execution to console.

getcomponents command parameters

Parameter	Description
-s [--version] arg	Version name.
-p [--product] arg	Specify product to get the list of components that belong to this product. If product is not specified, all components of this version will be listed.

getrevisions command parameters

Parameter	Description
-s [--version] arg	Version name.
-n [--component] arg	Component name.

uninstall command parameters

Parameter	Description
-n [--component] arg	Name of the component that should be uninstalled.
-l [--progress-to-console]	Print information about command execution to console.
--param arg	Pass additional parameters to the script. *<Name>*: *<value>*.
-e [--add-to-exclude]	Components to be deleted. Updating of this components will not be performed.

keyupdate command parameters

Parameter	Description
-m [--md5] arg	MD5 hash of previous key file.
-o [--output] arg	Output file name to store new key.
-b [--backup]	Backup of old key file if exists.
-g [--proxy] arg	Proxy-server for updating. *<Address>*:*<port>*
-u [--user] arg	Username for proxy server.
-k [--password] arg	Password for proxy server.
-l [--progress-to-console]	Print information about downloading to console.

download command parameters

Parameter	Description
--zones arg	Zone description file.
--key-dir arg	Directory where key file is located.
-l [--progress-to-console]	Print information about command execution to console.
-g [--proxy] arg	Proxy-server for updating. *<Address>*:*<port>*
-u [--user] arg	Username for proxy server.
-k [--password] arg	Password for proxy server.
-s [--version] arg	Version name.
-p [--product] arg	Product name.

Appendix B. Computer Threats and Neutralization Methods

With the development of computer technologies and network solutions malicious programs (malware) of different kinds, meant to strafe users, become more and more widespread. Their development began together with computer science and facilities of protection against them progressed alongside. Nevertheless, there is still no common classification for all possible threats due to their unpredictable development character and constant improvement of applicable technologies.

Malicious programs can be distributed through the Internet, local area networks, e-mail and portable data mediums. Some of them rely on the user's carelessness and lack of experience and can be run in completely automatic mode. Others are tools controlled by a computer cracker and they can harm even the most secure systems.

This chapter describes all of the most common and widespread types of malware, against which products of **Doctor Web** are aimed.

Classification of Computer Threats

Computer viruses

This type of malicious programs is characterized by the ability to implement its code into the executable code of other programs. Such implementation is called infection. In most cases the infected file becomes a virus carrier itself and the implemented code does not necessarily match the original. Most viruses are intended to damage or destroy data on the system. Viruses which infect files of the operating system (usually executable files and dynamic libraries) and activate upon launching of the infected file are called file viruses.

Some viruses infect boot records of diskettes and partitions or master boot records of fixed disks. Such viruses are called boot viruses. They take very little memory and remain ready to continue performing their tasks until a system roll-out, restart or shut-down occurs.

Macroviruses are viruses which infect documents used by the Microsoft Office and some other applications which allow macro commands (usually written in Visual Basic). Macro commands are a type of implemented programs (macros) written in a fully functional programming language. For instance, in Microsoft Word macros can automatically initiate upon opening (closing, saving, etc.) a document.

A virus which has the ability to activate and perform the tasks assigned by the virus writer only when the computer reaches a certain state (e.g. a certain date and time) is called a memory-resident virus.

Most viruses have some kind of protection against detection. Protection methods are being constantly improved and ways to overcome them are developed.

Encrypted viruses, for instance, cipher their code upon every infection to hamper their detection in a file, boot sector or memory. All copies of such viruses contain only a small common code fragment (the decryption procedure), which can be used as a virus signature.

Polymorphic viruses also encrypt there code, but besides that they generate a special decryption procedure which is different in every copy of the virus. This means that such viruses do not have byte signatures.

Stealth viruses perform certain actions to disguise their activity and thus conceal their presence in an infected object. Such viruses gather the characteristics of a program before infecting it and then plant these "dummy" characteristics which mislead the scanner searching for modified files.

Viruses can also be classified according to the programming language in which they are written (in most cases it is assembler, high-level programming languages, scripting languages, etc.) or according to the affected operating systems.

Computer worms

Worms have become a lot more widespread than viruses and other malicious programs recently. Like viruses they are able to reproduce themselves and spread their copies but they do not infect other programs. A worm infiltrates the computer from the worldwide or local network (usually via an attachment to an e-mail) and distributes its functional copies to other computers in the network. It can begin distributing itself either upon a user's action or in an automatic mode, choosing which computers to attack.

Worms do not necessarily consist of only one file (the worm's body). Many of them have an infectious part (the shellcode), which loads into the main memory (RAM) and then downloads the worm's body as an executable file via the network. If only the shellcode is present in the system, the worm can be rid of by simply restarting the system (at which the RAM is erased and reset). However, if the worm's body infiltrates the computer, then only an anti-virus program can cope with it.

Worms have the ability to cripple entire networks even if they do not bear any payload (i.e. do not cause any direct damage) due to their intensive distribution.

Trojan horses (Trojans)

This type of malicious program cannot reproduce or infect other programs. A Trojan substitutes a high-usage program and performs its functions (or imitates the programs operation). At the same time it performs some malicious actions in the system (damages or deletes data, sends confidential information, etc.) or makes it possible for another person to access the computer without permission, e.g. to harm the computer of a third party.

A Trojan's masking and malicious facilities are similar to those of a virus and it can even be a component of a virus. However, most Trojans are distributed as separate executable files (through file-exchange servers, removable data carriers or e-mail attachments), which are launched by a user or a system task.

Rootkits

It is a type of malicious program used to intercept system functions of an operating system in order to conceal itself. Besides, a rootkit can conceal tasks of other programs, registry keys, folders and files. It can be distributed either as an independent program or a component of another malicious program. A rootkit is basically a set of utilities, which a cracker installs on a system to which she had just gained access.

There are two kinds of rootkits according to the mode of operation: User Mode Rootkits (UMR) which operate in user mode (intercept functions of the user mode libraries) and Kernel Mode Rootkits (KMR) which operate in kernel mode (intercept functions on the level of the system kernel, which makes it harder to detect).

Hacktools

Hacktools are programs designed to assist the intruder with hacking. The most common among them are port scanners which detect vulnerabilities in firewalls and other components of the computer's protection system. Besides hackers, such tools are used by administrators to check the security of their networks. Occasionally, common software which can be used for hacking and various programs that use social engineering techniques are designated as among hacktools as well.

Spyware

This type of malicious programs is designed to perform monitoring of the system and send the gathered information to a third party – creator of the program or some other person concerned. Among those who may be concerned are: distributors of spam and advertisements, scam-agencies, marketing agencies, criminal organizations, industrial espionage agents, etc.

Spyware is secretly loaded to your system together with some other software or when browsing certain HTML-pages and advertising windows. It then installs itself without the user's permission. Unstable browser operation and decrease in system performance are common side effects of spyware presence.

Adware

Usually this term is referred to a program code implemented into freeware programs which perform forced display of advertisements to a user. However, sometimes such codes can be distributed via other malicious programs and show advertisements in internet-browsers. Many adware programs operate with data collected by spyware.

Joke programs

Like adware, this type of malicious programs does not deal any direct damage to the system. Joke programs usually just generate message boxes about errors that never occurred and threaten to perform actions which will lead to data loss. Their purpose is to frighten or annoy a user.

Dialers

These are special programs which are designed to scan a range of telephone numbers and find those where a modem answers. These numbers are then used to mark up the price of telephoning facilities or to connect the user to expensive telephone services.

All the above programs are considered malicious because they pose a threat to the user's data or his right of confidentiality. Programs that do not conceal their presence, distribute spam and different traffic analyzers are usually not considered malicious, although they can become a threat under certain circumstances.

Among other programs there is also a class of riskware programs. These were not intended as malicious, but can potentially be a threat to the system's security due to their certain features. Riskware programs are not only those which can accidentally damage or delete data, but also ones which can be used by crackers or some malicious programs to do harm to the system. Among such programs are various remote chat and administrative tools, FTP-servers, etc.

Below is a list of various hacker attacks and internet fraud:

- **Brute force attack** – performed by a special Trojan horse program, which uses its inbuilt password dictionary or generates random symbol strings in order to figure out the network access password by trial-and-error.
- **DoS-attack** (denial of service) or **DDoS-attack** (distributed denial of service) – a type of network attack, which verges on terrorism. It is carried out via a huge number of service requests sent to a server. When a certain number of requests is received (depending on the server's hardware capabilities) the server becomes unable to cope with them and a denial of service occurs. DDoS-attacks are carried out from many different IP-addresses at the same time, unlike DoS-attacks, when requests are sent from one IP-address.
- **Mail bombs** – a simple network attack, when a big e-mail (or thousands of small ones) is sent to a computer or a company's mail server, which leads to a system breakdown. There is a special method of protection against such attacks used in the Dr.Web products for mail servers.
- **Sniffing** – a type of network attack also called "passive tapping of network". It is unauthorized monitoring of data and traffic flow performed by a packet sniffer – a special type of non-malicious program, which intercepts all the network packets of the monitored domain.
- **Spoofing** – a type of network attack, when access to the network is gained by fraudulent imitation of connection.
- **Phishing** – an Internet-fraud technique, which is used for stealing personal confidential data such as access passwords, bank and identification cards data, etc. Fictitious letters supposedly from legitimate organizations are sent to potential victims via spam mailing or mail worms. In these letters victims are offered to visit phony web sites of such organizations and confirm the passwords, PIN-codes and other personal information, which is then used for stealing money from the victim's account and for other crimes.
- **Vishing** – a type of Phishing technique, in which war dialers or VoIP is used instead of e-mails.

Actions Applied to Threats

There are many methods of neutralizing computer threats. Products of **Doctor Web** combine these methods for the most reliable protection of computers and networks using flexible user-friendly settings and a comprehensive approach to security assurance. The main actions for neutralizing malicious programs are:

Cure – an action applied to viruses, worms and trojans. It implies deletion of malicious code from infected files or deletion of a malicious program's functional copies as well as the recovery of affected objects (i.e. return of the object's structure and operability to the state which was before the infection) if it is possible. Not all malicious programs can be cured. However, products of **Doctor Web** are based on more effective curing and file recovery algorithms compared to other anti-virus manufacturers.

Move to quarantine – an action when the malicious object is moved to a special folder and isolated from the rest of the system. This action is preferable in cases when curing is impossible and for all suspicious objects. It is recommended to send copies of such files to the virus laboratory of **Doctor Web** for analysis.

Delete – the most effective action for neutralizing computer threats. It can be applied to any type of malicious objects. Note, that deletion will sometimes be applied to certain files for which curing was selected. This will happen if the file contains only malicious code and no useful information. E.g. curing of a computer worm implies deletion of all its functional copies.

Block, rename – these actions can also be used for neutralizing malicious programs. However, fully operable copies of these programs remain in the file system. In case of the Block action all access attempts to or from the file are blocked. The Rename action means that the extension of the file is renamed which makes it inoperative.

Appendix C. Naming of Viruses

Specialists of the **Dr.Web Virus Laboratory** give names to all collected samples of computer threats. These names are formed according to certain principles and reflect a threat's design, classes of vulnerable objects, distribution environment (OS and applications) and some other features. Knowing these principles may be useful for understanding software and organizational vulnerabilities of the protected system. In certain cases this classification is conventional, as some viruses can possess several features at the same time. Besides, it should not be considered exhaustive, as new types of viruses constantly appear and the classification is made more precise. The full and constantly updated version of this classification is available at the Dr.Web web site.

The full name of a virus consists of several elements, separated with full stops. Some elements at the beginning of the full name (prefixes) and at the end of it (suffixes) are standard for the accepted classification. Below is a list of all prefixes and suffixes used in **Dr.Web** divided into groups.

Prefixes

Affected operating systems

The prefixes listed below are used for naming viruses infecting executable files of certain OS's:

- Win – 16-bit Windows 3.1 programs
- Win95 – 32-bit Windows 95/98/Me programs
- WinNT – 32-bit Windows NT/2000/XP/Vista programs
- Win32 – 32-bit Windows 95/98/Me and NT/2000/XP/Vista programs
- Win32.NET – programs in Microsoft .NET Framework operating system
- OS2 – OS/2 programs

- Unix – programs in various Unix-based systems
- Linux – Linux programs
- FreeBSD – FreeBSD programs
- SunOS – SunOS (Solaris) programs
- Symbian – Symbian OS (mobile OS) programs

Note that some viruses can infect programs of one system even if they are designed to operate in another system.

Macrovirus prefixes

The list of prefixes for viruses which infect MS Office objects (the language of the macros infected by such type of virus is specified):

- WM – Word Basic (MS Word 6.0-7.0)
- XM – VBA3 (MS Excel 5.0-7.0)
- W97M – VBA5 (MS Word 8.0), VBA6 (MS Word 9.0)
- X97M – VBA5 (MS Excel 8.0), VBA6 (MS Excel 9.0)
- A97M – databases of MS Access'97/2000
- PP97M – MS PowerPoint presentations
- O97M – VBA5 (MS Office'97), VBA6 (MS Office 2000); this virus infects files of more than one component of MS Office

Development languages

The HLL group is used to name viruses written in high level programming languages, such as C, C++, Pascal, Basic and others.

- HLLW – worms
- HLLM – mail worms
- HLLO – viruses overwriting the code of the victim program,
- HLLP – parasitic viruses
- HLLC – companion viruses

The following prefix also refers to development language:

- Java – viruses designed for the Java virtual machine

Script-viruses

Prefixes of viruses written in different scrip languages:

- VBS – Visual Basic Script
- JS – Java Script
- Wscript – Visual Basic Script and/or Java Script
- Perl – Perl
- PHP – PHP
- BAT – MS-DOS command interpreter

Trojan horses

- Trojan – a general name for different Trojan horses (Trojans). In many cases the prefixes of this group are used with the Trojan prefix.
- PWS – password stealing Trojan
- Backdoor – Trojan with RAT-function (Remote Administration Tool – a utility for remote administration)
- IRC – Trojan which uses Internet Relay Chat channels
- DownLoader – Trojan which secretly downloads different malicious programs from the Internet
- MulDrop – Trojan which secretly downloads different viruses contained in its body
- Proxy – Trojan which allows a third party user to work anonymously in the Internet via the infected computer
- StartPage (synonym: Seeker) – Trojan which makes unauthorized replacement of the browser's home page address (start page)
- Click – Trojan which redirects a user's browser to a certain web site (or sites)
- KeyLogger – a spyware Trojan which logs key strokes; it may send collected data to a malefactor
- AVKill – terminates or deletes anti-virus programs, firewalls, etc.
- KillFiles, KillDisk, DiskEraser – deletes certain files (all files on drives, files in certain directories, files by certain mask, etc.)

- DelWin – deletes files vital for the operation of Windows OS
- FormatC – formats drive C
- FormatAll – formats all drives
- KillMBR – corrupts or deletes master boot records (MBR)
- KillCMOS – corrupts or deletes CMOS memory

Tools for network attacks

- Nuke – tools for attacking certain known vulnerabilities of operating systems leading to abnormal shutdowns of the attacked system
- DDoS – agent program for performing a DDoS-attack (Distributed Denial Of Service)
- FDoS (synonym: Flooder) – programs for performing malicious actions in the Internet which use the idea of DDoS-attacks; in contrast to DDoS, when several agents on different computers are used simultaneously to attack one victim system, an FDoS-program operates as an independent "self-sufficient" program (Flooder Denial of Service)

Malicious programs

- Adware – an advertising program
- Dialer – a dialer program (redirecting modem calls to predefined paid numbers or paid resources)
- Joke – a joke program
- Program – a potentially dangerous program (riskware)
- Tool – a program used for hacking (hacktool)

Miscellaneous

- Generic – this prefix is used after another prefix describing the environment or the development method to name a typical representative of this type of viruses. Such virus does not possess any characteristic features (such as text strings, special effects, etc.) which could be used to assign it some specific name.

- Exploit – a tool exploiting known vulnerabilities of an O S or application to implant malicious code or perform unauthorized actions.
- Silly – this prefix was used to name simple featureless viruses the with different modifiers in the past.

Suffixes

Suffixes are used to name some specific virus objects:

- Origin – this suffix is added to names of objects detected using the *Origins Tracing* algorithm.
- generator – an object which is not a virus, but a virus generator.
- based – a virus which is developed with the help of the specified generator or a modified virus. In both cases the names of this type are generic and can define hundreds and sometimes even thousands of viruses.
- dropper – an object which is not a virus, but an installer of the given virus.

Appendix D. Technical Support

Support is available to customers who have purchased a commercial version of **Dr.Web** products. Visit **Doctor Web** technical support website at http://support.drweb.com/.

If you encounter any issues installing or using company products, take advantage of the following **Doctor Web** support options:

- Download and review the latest manuals and guides at http://download.drweb.com/doc
- Read the frequently asked questions at http://support.drweb.com/
- Browse **Dr.Web** official forum at http://forum.drweb.com/

If you have not found solution for the problem, you can request direct assistance from **Doctor Web** technical support by filling in the web-from in the corresponding section of the support site at http://support.drweb.com/.

For regional office information, visit the official **Doctor Web** website at http://company.drweb.com/contacts/moscow.

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